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GUS W. VAN BEEK

THE EXCAVATIONS AT DIBON (DHĪBÂN) IN MOAB

PART I: THE FIRST CAMPAIGN, 1950-1951

FRED V. WINNETT

PART II: THE SECOND CAMPAIGN, 1952

WILLIAM L. REED

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PREFACE

It is with great pleasure that we present here the first of the final reports on the excavations at Dhiban undertaken by the Schools between 1950 and 1956 under the direction of Professors Winnett, Reed, Tushingham, and Morton. As the capital of ancient Moab and the first Moabite site to be systematically excavated, the publication of the excavation of Dhiban is of considerable importance for specialists in the archaeology of Palestine and for students of the archaeology of the Near East as a whole. These reports, together with those remaining to be published in the not-too-distant future, will shed much needed light on the cultural history of the land beyond the Jordan.

An explanation of the poor quality of the plans in Part I of this volume is due the reader. The original drawings were left at the School in Jerusalem by Professor Winnett following the conclusion of his excavations in 1951. He, the Editor, and Dr. Paul W. Lapp, Director of the Jerusalem School, have done everything possible to locate these drawings. In spite of our combined efforts extending over a period of several months, they could not be found. It was therefore decided to use the working prints furnished by Professor Winnett in this report. However deficient they may be, they will nevertheless permit the student to follow the 1950-51 excavation report better than if they were omitted altogether.

The Editor regrets the delay in the appearance of this volume of the ANNUAL. The manuscripts were received from Professors Winnett and Reed in the Spring and early Summer of 1961, at a time when the Editor's preparations for field work were far advanced. Upon completion of field work in Spring, 1962, the demands for a plethora of reports and the backlog of work accumulated during six months in the field prevented work on the manuscripts for several months more. For this delay, though unavoidable, the Editor wishes to express this apology to the authors, to the members of the Schools, and to all others who have awaited this volume.

GUS W. VAN BEEK

May 26, 1963

ABBREVIATIONS AND BIBLIOGRAPHY

Abū Ghōsh I	R. deVaux, "Céramique musulmane des Xe-XIe siècles à Abu-Ghosh (Palestine)," *Bulletin d'Études Orientales*, XI, 1945-46, pp. 13-30.
Abū Ġōsh II	R. deVaux and A. M. Steve, *Fouilles à Qaryet el-'Enab Abū Ġôsh*, Palestine, 1950.
ADAJ	*Annual of the Department of Antiquities of Jordan.*
Ader	Ray L. Cleveland, "The Excavation of the Conway High Place (Petra) and Soundings at Khirbet Ader," *AASOR*, XXXIV-XXXV, Part II, New Haven, 1960, pp. 79-97.
AJA	*American Journal of Archaeology.*
Amman I	G. Lankester Harding, "Two Iron-Age Tombs in Amman," *ADAJ*, 1, 1951, pp. 37-40.
Amman II	G. Lankester Harding, "A Roman Family Vault on Jebel Jofeh, 'Amman," *QDAP*, XIV, 1950, pp. 81-94.
Amman III	G. Lankester Harding, "A Nabataean Tomb at 'Amman," *QDAP*, XII, 1946, pp. 58-60.
Amman IV	G. Lankester Harding, "A Roman Tomb in Amman," *ADAJ*, 1, 1951, pp. 30-33.
ANET	*Ancient Near Eastern Texts relating to the Old Testament*, ed. J. B. Pritchard, Princeton, 2nd ed., 1955.
AASOR	*Annual of the American Schools of Oriental Research.*
Athlit	C. N. Johns, "Excavations at Pilgrims' castle, 'Atlīt (1932-3), Stables at the South-west of the Suburb," *QDAP*, V, 1936, pp. 31-60.
BA	*The Biblical Archaeologist.*
BASOR	*The Bulletin of the American Schools of Oriental Research.*
Beth-shan I	G. M. Fitzgerald, *The Four Canaanite Temples of Beth-shan*, Philadelphia, 1930.
HM	Hand-made.
Hazor I	Y. Yadin *et al.*, *Hazor I*, Jerusalem, 1958.
Hawam	R. W. Hamilton, "Excavations at Tell Abu Hawām," *QDAP*, IV, 1935, pp. 1-69.
IEJ	*Israel Exploration Journal.*
Jericho I	James L. Kelso, *Excavations at New Testament Jericho and Khirbet en-Nitla*, *AASOR*, XXIX-XXX, New Haven, 1955.
Jericho II	James B. Pritchard, *The Excavation at Herodian Jericho, 1951*, *AASOR*, XXXII-XXXIII, New Haven, 1958.
Jerusalem, North Wall	R. W. Hamilton, "Excavations against the North Wall of Jerusalem, 1937-8," *QDAP*, X, 1944, pp. 1 ff.
JPOS	*The Journal of the Palestine Oriental Society.*
Lachish III	O. Tufnell, M. Murray, and D. Diringer, *Lachish III (Tell ed-Duweir)*, London, 1953.
Mefjer	D. C. Baramki, "The Pottery from Kh. el-Mefjer," *QDAP*, X, 1940-1944, pp. 65-103.
Megiddo I	R. Lamon and G. Shipton, *Megiddo I: Seasons of 1925-34, Strata I-V*, Chicago, 1939.
Megiddo II	G. Loud, *Megiddo II: Seasons of 1935-39*, Chicago, 1949.
Megiddo Tombs	P. L. O. Guy, *Megiddo Tombs*, Chicago, 1938.
Meqabelein	G. Lankester Harding, "An Iron-Age Tomb at Meqabelein," *QDAP*, XIV, 1950, pp. 44-48.
M.I.	Mesha Inscription.
Moabites I	A. H. Van Zyl, *The Moabites*, Leiden, 1960.
Naṣbeh I	C. C. McCown *et al.*, *Tell en-Naṣbeh, I: Archaeological and Historical Results*, New Haven, 1947.
Naṣbeh II	W. F. Badè, *Excavations at Tell en-Naṣbeh*. Part II. The Pottery, by J. C. Wampler, Berkeley and New Haven, 1947.
Nebo I	Sylvester J. Saller, *The Memorial of Moses on Mount Nebo*, Jerusalem, 1941. Text and Plates.
Beth-shan II	G. M. Fitzgerald, *Beth-shan Excavations 1921-23*, Philadelphia, 1931.
Beth-shemesh	Elihu Grant, *Beth Shemesh*, Haverford, 1929.
Beth-zur I	Ovid R. Sellers, *The Citadel of Beth-zur*, Philadelphia, 1933.
Beth-zur II	Paul and Nancy Lapp, "A Comparative Study of a Hellenistic Pottery Group from Beth-Zur," *BASOR*, No. 151, 1958, pp. 1-8.
Dibon I	F. V. Winnett, "Excavations at Dibon in Moab, 1950-51," *BASOR*, No. 125, 1952, pp. 7-20.
Dibon II	A. Douglas Tushingham, "Excavations at Dibon in Moab, 1952-53," *BASOR*, No. 133, 1954, pp. 6-25.
Dibon III	William L. Reed, "Excavations in Jordan, 1951-52, Dhībân," *ADAJ*, II, 1953, pp. 86-87.
EEP I	Nelson Glueck, *Explorations in Eastern Palestine, I*, *AASOR*, XIV, New Haven, 1934, pp. 1-114.
EEP II	Nelson Glueck, *Explorations in Eastern Palestine, II*, *AASOR*, XV, 1935.
EEP III	Nelson Glueck, *Explorations in Eastern Palestine, III*, *AASOR*, XVIII-XIX, New Haven, 1939.

EEP IV	Nelson Glueck, *Explorations in Eastern Palestine, IV, AASOR*, XXV-XXVIII, Part I & II, New Haven, 1951.
Gerasa	Carl Kraeling, *Gerasa, City of the Decapolis*, New Haven, 1939.
Gibeah	Lawrence A. Sinclair, "An Archaeological Study of Gibeah (Tell el-Fûl), *AASOR*, XXXIV-XXXV, New Haven, 1960.
Nebo II	Hilary Schneider, *The Memorial of Moses on Mount Nebo: The Pottery*, Jerusalem, 1950.
Negeb I	J. H. Iliffe, "Nabatean Pottery from the Negeb," *QDAP*, III, pp. 132-135.
PAM	Palestine Archaeological Museum, Jerusalem, Jordan.
PEFQS	*Palestine Exploration Fund Quarterly Statement.*
PEQ	*Palestine Exploration Quarterly.*
PEFA	*Palestine Exploration Fund, Annual.*
Petra I	G. and A. Horsfield, "Sela-Petra, The Rock, of Edom and Nabatene," *QDAP*, VII, 1938, pp. 1-42.
Petra II	G. and A. Horsfield, "Sela-Petra, the Rock, of Edom and Nabatene, IV. The Finds," *QDAP*, IX, 1942, pp. 105-204.
Petra III	Ray L. Cleveland, "The Excavation of the Conway High Place (Petra) and Soundings at Khirbet Ader," *AASOR*, XXXIV-XXXV, New Haven, 1960, pp. 55-78.
QDAP	*Quarterly of the Department of Antiquities in Palestine.*
Qumran I	R. deVaux, "Exploration de la région de Qumrân," *RB*, 60, 1953, pp. 540-561.
Qumran II	R. deVaux, "Fouilles au Khirbet Qumrân," *RB*, 61, 1954, pp. 206-236.
Qumran III	R. deVaux, "Fouilles au Khirbet Qumrân," *RB*, 63, 1956, pp. 533-577.
RB	*Revue Biblique.*
Tell Beit Mirsim I	William F. Albright, *The Excavation of Tell Beit Mirsim, I, AASOR*, XII, New Haven, 1932.
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Tirzah I	R. deVaux, "La quatrième campagne de fouilles à Tell el-Far'ah, près Naplouse," *RB*, 59, 1952, pp. 551-583.
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Silet edh-Dhahr	O. R. Sellers and D. C. Baramki, "A Roman-Byzantine Burial Cave in Northern Palestine," *BASOR*, Supplementary Studies, Nos. 15-16, New Haven, 1953.
ZDPV	*Zeitschrift des Deutschen Palästinavereins.*

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PART I

THE EXCAVATIONS AT DIBON (DHĪBÂN) IN MOAB

THE FIRST CAMPAIGN, 1950-51

BY

FRED V. WINNETT

TO

MARGARET

1. The Site

Dibon is situated 20 km. east of the Dead Sea and 64 km. south of 'Amman on the highway leading to Kerak and 'Aqabah.[1] It lies near the southern edge of a plateau known as *el-Kūrah*[2] which is flanked on the north and south by two tremendous canyons: the Wâdī el-Wālā,[3] 8 km. to the north of Dibon, and the Wâdī el-Mūjib (Bib. Arnon), 3 km. to the south. The Dibon site consists of two mounds. One is occupied by the modern village of Dhībān whose Arabic name preserves in only slightly altered form the ancient Moabite and Hebrew name Dībôn.[4] Immediately to the northwest of Dhiban and linked with it by a saddle lies another mound the top of which is covered with the remains of Byzantine and Arab buildings. The line of a city wall, clearly visible along the eastern crest of this mound, creates the *a priori* impression that here lies the site of ancient Dibon. This impression is strengthened by the observation that the southern mound on which the modern village of Dhiban is situated, merges with the plateau on the east and hence has no defensible border on that side, whereas the mound to the northwest is bordered by a deep wadi on the west and north, by a moderate depression on the east, and by a shallower but defensible depression on the south. Hence it is the northwestern mound which would seem to mark the site of ancient Dibon.[5]

The mound is comparatively large, the top measuring approximately 200 meters from east to west and 150 meters from north to south, and thus comprises an area of some six acres. The natural strength of the site is not immediately apparent to a traveller approaching it from the highway, for the top of the mound is set lower than the level of the surrounding countryside. The most conspicuous object on the mound, until it was removed, was a sheikh's tomb (see pl. 9:2) near the southeast corner.[6] To the west of this tomb is a knoll marking the ruins of a structure of some size. The open space between the tomb and the knoll forms the most natural means of access to the summit of the mound today, from the trail which runs westward from the main highway.[7]

There are no springs in the immediately vicinity of Dhiban; hence the inhabitants of ancient Dibon must have depended, like their modern counterparts, on rain-fed cisterns for a water supply. The remains of an aqueduct can be traced for a long distance to the east of the mound but it cannot be earlier than the Roman period. The two mounds and their immediate environs are honeycombed

[1] The descriptions of the site left by early European travelers have been conveniently brought together by Brünnow and von Domaszewski, *Die Provincia Arabia* (Strassburg, 1904), I, pp. 30 f.; II (1905), pp. 305 f.; cf. also Clermont-Ganneau, "Un plan de la ville de Dibon," *Revue archéologique* (1870-71), pp. 159 f. The first to make a careful surface examination of the site was Duncan Mackenzie in 1910; see his report, "Dibon: The City of King Mesha and of the Moabite Stone," *PEFQS*, 1913, pp. 57-79. For later references, cf. W. F. Albright, "Archaeological and Topographical Explorations in Palestine and Syria," *BASOR*, 49 (1933), p. 28; Père Savignac, "Sur les pistes de Transjordanie méridionale," *RB*, 45, (1936), pp. 238 f.; Alois Musil, *Arabia Petraea*, I (Vienna, 1907), pp. 376-80; Nelson Glueck, *EEP I*, p. 51; *EEP III*, p. 115; F. M. Abel, *Géographie de la Palestine*, II, pp. 304 f.; and A. H. Van Zyl, *The Moabites* (Leiden, 1960), pp. 77 f.

[2] Not el-Ḳura as in Van Zyl, p. 77. Burckhardt, *Travels in Syria and the Holy Land*, p. 371, says that this term was often employed in Syria to designate plains. Cf. Brünnow and von Domaszewski, *op. cit.*, p. 5.

[3] Sometimes spelled Waleh, but Jordan Government maps use the spelling Wālā. The Wālā is known in its upper reaches as Wadi eth-Themed and in its lower reaches as Wadi (or Seil) el-Heidān. It is the largest tributary of the Mūjib, joining it about 4 km. from the Dead Sea (cf. Abel, *Géog.*, I, carte X).

[4] For the abnormal development of Moabite and Hebrew *d* into mod. Arabic *ḏ*, see G. Kampffmeyer, "Alte Namen im heutigen Palästina und Syrien," *ZDPV*, 16 (1893), pp. 6 f. and 36.

[5] To the east of the northern half of this mound lies a ridge which also shows signs of former occupation, but it is not of such a character as to make it a serious contender for the site of ancient Dibon. However, the presence of cisterns and of Nabataean and Byzantine sherds shows that it received some of the overflow of population from Dibon as early as the Nabataean period, and possibly earlier, although foundation trenches dug there in recent times by prospective builders have disclosed no pre-Nabataean remains.

[6] According to Savignac, *op. cit.*, p. 238, it was the tomb of Sheikh Sālim b. Miṣlaḥ, presumably a sheikh of the Bani Hamideh who inhabit this area. The tomb was removed in the course of later excavation. See n. 18.

[7] This trail crosses the saddle between the two mounds, descends into the wadi, then gains the plateau to the west. Eastward the trail leads to Umm er-Riṣāṣ.

with cisterns,[8] the site resembling in this respect neighboring 'Arā'ir (Bib. Aroer).

Apart from pilgrims like Fetellus (*ca.* A. D. 1130),[9] the first European explorer to mention Dhiban is Seetzen.[10] No particular attention was paid to the site, however, until the "Moabite Stone," an inscribed stele set up by Mesha, king of Moab, was discovered there in A. D. 1868.[11] It is evident from line 3 of the inscription ("I made *this* high-place for Chemosh in Qrḥh") that the stele was originally set up in a sanctuary constructed by Mesha at a town called Qrḥh.[12] The prominence given to the account of his building operations at Qrḥh and the specific mention of the construction of a palace (*bt mlk*) there suggest that Qrḥh served as his capital—after his successful revolt against Israel at least. If the stele was found at the place where it was originally set up, the mound northwest of the modern village of Dhiban must mark the site of Qrḥh. Of course, the stone might have been set up somewhere else and later been moved to Dibon, but if invaders had removed the stone from its original site they would surely have carried it home as a trophy of victory[13] and not have merely shifted it from one Moabite town to another—and to Mesha's birthplace at that![14]

Although Mesha was a native of Dibon, the story in II Kings 3 of the campaign conducted against him by Jehoshaphat of Judah, Jehoram of Israel, and the king of Edom, and of how Mesha finally resorted to the desperate expedient of sacrificing his eldest son on the wall of Qîr-ḥareśeth, implies that the royal residence in the early part of his reign was at Qîr-ḥareśeth (mod. el-Kerak).[15] Abel (*Géographie de la Palestine*, II, p. 418) and Rudolph (*Jeremia*, p. 247) identify Qrḥh with Kerak but this identification seems improbable for the reason given above. After his successful revolt Mesha may have felt that if he were to retain possession of the territory north of the Wâdī Wālā which he had wrested from the Israelites, a shift of the royal residence from Qîr-ḥareśeth (about 65 km. south of Madeba) to a site nearer the danger zone was imperative.

The name *Qrḥh* which Mesha gave to his new foundation is usually explained from Heb. *qorḥah*, "baldness, bald spot," but it seems unlikely that a royal foundation would have received such an undignified name. Ar. *qurḥah*, "prominent, outstanding," and Syr. *qᵉrîḥā*, "prominent," offer more promising clues to the meaning of the name in

[8] A survey of the cisterns on the northwestern mound was made by J. A. Thompson. He catalogued no less than 66, evidence that the use of the term "honeycombed" is justified. In view of the present conditions of the site, Mr. Thompson's catalogue cannot be regarded as exhaustive. On the sides of the surrounding wadies he noted 30 more cisterns. They are all of the pear-shaped type, the necks being about 1 m. in diameter and from about 30 cm. to 1 m. in height. The depth of the cisterns varied from 1 m. to 10.50 m. Some are plastered. Many of the cisterns are still in use today. They are covered by rounded concrete tops into which is set a square iron frame with a trap-door which can be locked.

[9] Cf. *Palestine Pilgrims' Text Society* (London, 1896), Vol. 5, p. 21.

[10] *Reisen durch Syrien, Palästina, Phönicien, die Transjordan-Länder, Arabia Petraea und Unter-Aegypten* (Berlin, 1854-55), I, pp. 395, 409.

[11] For recent translations of this inscription, see W. F. Albright in *ANET*, pp. 320 f.; E. Ullendorf in *Documents from Old Testament Times*, ed. D. Winton Thomas (London, 1958), pp. 195-8; and A. H. Van Zyl, *The Moabites* (Leiden, 1960), pp. 161-92. A bibliography of the most important discussions of the inscription will be found in R. Dussaud, "Les travaux et les découvertes archéologiques de Ch. Clermont-Ganneau," *Syria*, IV (1923), p. 141 and notes, and in D. Sidersky, "La Stèle de Mesa. Index Bibliographique," *Revue archéologique*, 1920. Cf. also G. A. Cooke, *A Text-Book of North-Semitic Inscriptions* (Oxford, 1903), pp. 1-14; C. F. Burney, *Notes on the Hebrew Text of Kings* (Oxford, 1903), pp. 371 f.; J. A. Montgomery, *Kings* (*I.C.C.*), p. 358, n. 1; S. J. Saller and B. Bagatti, *The Town of Nebo* (Jerusalem, 1949), pp. 210 ff.; F. M. Cross and D. N. Freedman, *Early Hebrew Orthography* (American Oriental Series, Vol. 36 [New Haven, 1952]), chap. 3.

[12] According to line 24, Qrḥh was the name of the town (*qr*), not of the sanctuary. The name has been variously vocalized: *Qarḥoh*, *Qᵉrîḥoh*, *Qᵉrēḥoh*, the latter two on the analogy of Heb. *Yrḥh* (Jericho), M. T. *Yᵉrîḥô*, *Yᵉrēḥô*.

[13] Just as the Elamites carried home to Susa from Babylonia a stele inscribed with the Code of Hammurabi.

[14] In his inscription (line 1 f.) Mesha calls himself "the Dibonite" (*hdybny*), the appellation seeming to denote place of origin rather than tribal affiliation. In lines 21 and 28, Dibon (perhaps pronounced "Daibon" in Moabite; see Van Zyl, pp. 174 f. and 187) is the name of a district, but in view of the evidence for the existence of a town of Dibon long before Mesha's time, the district doubtless owed its name to the presence of this town at its heart.

[15] The Hebrew references to it are suprisingly few; cf. *Qîr-ḥareśeth* in II Kings 3:25 and Is. 16:7, *Qîr-ḥereś* in Is. 16:11 and Jer. 48:31, 36. See the discussion, with bibliography, in Van Zyl, pp. 69-71. For the Kerak of the Crusaders, see Paul Deschamps, *La Défense du Royaume de Jérusalem* (Paris, 1939), Album, plates iv-xxvii; A. Musil, *Arabia Petraea*, I, pp. 45-62; and *Enc. of Islam*: Kerak.

Moabite. The silence of Hebrew writers respecting Qrḥh is peculiar inasmuch as they make frequent reference to Dibon.[16] How can their detailed knowledge of Moabite topography, as revealed by such passages as Isaiah 15-16 and Jeremiah 48, be reconciled with their failure to mention the royal city of Qrḥh? The most natural solution of the problem is to suppose that Qrḥh was the official name of a new royal suburb added to the existing town of Dibon, but that the twin city continued to be generally known by the name of the older half.

The site chosen for Qrḥh does not seem to have been occupied previously, for Mesha states (M. I., ll. 24 f.) that it contained no cisterns and he had to have such hewn. This poses a difficult problem respecting the relative locations of Dibon and Qrḥh. It does not seem probable that ancient Dibon stood on the southern mound (the mound on which the modern village of Dhiban stands) because of the indefensible character of its eastern flank.[17] On the other hand, the discovery of the Mesha stele on the northwestern mound, as well as the strongly fortified character of that mound, suggest that it marks the site of Qrḥh. Therefore it seems necessary to conclude that Qrḥh and Dibon were both located on the northwestern mound. The early settlers would doubtless have occupied that part of the mound where the sides are steepest and most easily defensible, namely the northern and northwestern areas. Hence it is probable that Mesha's royal suburb was located on the southern and southeastern sections of the mound—and it was here that Mesha's stele was actually found.[18] That the mound in this area once had a different configuration from that which it has today was suggested by the first season's excavations (see below), but a final solution of the problem must await further investigation.[19]

The history of Dibon can be traced back to the 13th century B. C.[20] but the site was occupied in the Early Bronze Age, as excavation of the mound has shown (see below, pp. 12-13).[21] The Early Bronze civilization of Moab, and of Transjordan generally, is believed to have been destroyed late in the third millennium by Amorites coming down from the north and the land reverted to nomadism.[22] But by the time of the arrival of the Israelites under Moses in the late 13th century the Amorites had developed two kingdoms, or city-states, one at Ashtaroth (mod. Tell Ash'ari) in the north (Josh. 13:12), the other at Heshbon (mod. Ḥisbān), 21 km. east of the north end of the Dead

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[16] Cf. Num. 21:30; 32:3, 34; 33:45 f.; Josh. 13:9, 17; Is. 15:2; Jer. 48:18, 22. Cf. also "the waters of Dimon" in Is. 15:9. Van Zyl (p. 80) thinks the name "Dibon" has here been changed to "Dimon" in order to get an alliteration with the following *dām*, but see J. Simons, *The Geographical and Topographical Texts of the Old Testament* (Leiden, 1959), pp. 436 f.

[17] See above, p. 5.

[18] "D'après la tradition locale, la stèle de Mésa fut trouvée vers l'angle S.-E. de ces ruines, à la pointe méridionale d'un grand *birkeh* occupant vraisemblement une partie du fossé oriental. Tout près, a l'O., se trouve un lieu sacré, *le mizar el-Khalil*, avec la tombe du cheikh Sâlem eben Mişlaḥ (Fig. 1) bâtie sur les soubassements d'un édifice important qui fait songer au temple de Camosh où dut probablement être placée la stèle. On sait avec quelle persistance, en Orient, les sanctuaires se succèdent sur le même emplacement, tout en changeant de vocable" (Père Savignac in *RB*, 45 [1936], p. 238). Cf. also Schick's remark: "Der Inschriftstein des Mesa selbst soll nach Aussage der Beduinen, die ihn noch an Ort und Stelle gesehen haben, womit auch das Zeugniss des Missionars Klein übereinstimmt, innerhalb eines grossen Steinringes gelegen haben (s. den Plan), den aber auffallenderweise Klein und Tristram gar nicht erwähnen, obwohl er noch jetzt von den Beduinen als angebliche Grabstätte eines *Nebi* (Propheten) heilig gehalten, daher zur sicheren Aufbewahrung von Gerätschaften und Kostbarkeiten benutzt wird," *ZDPV*, 2, 1879, p. 8, with sketch following Map 112). Cf. also Palmer, *PEFQS*, 1871, p. 70, and *The Desert of the Exodus*, p. 411; H. B. Tristram, *The Land of Moab* (London, 1874), pp. 134 f.; and Duncan Mackenzie, *PEFQS*, 1913, pp. 73 f.

[19] Tristram, *op. cit.*, p. 132, was of the opinion that "Dibon was a twin city, upon two adjacent knolls . . . surrounded by a common wall." Duncan Mackenzie refers to evidence of a fortified gateway where the trail crosses the saddle between the mounds. This tends to support Tristram's view that both mounds were walled. Excavation of the saddle would do much to clarify the problem.

[20] It does not seem possible to identify with Dibon the *Tpn* mentioned in an inscription of Thutmosis III at Karnak (cf. *ANET*, p. 242) and so carry the history of the city back to the 15th century B. C. (cf. W. F. Albright, *BASOR*, No. 125, p. 9, n. 7; and Van Zyl, pp. 39 f.

[21] For a list of other EB sites in Moab, cf. Glueck, *EEP II*, p. 148; for a summary of the EB civilization of Transjordan, cf. Van Zyl, pp. 95-106.

[22] Cf. Glueck, *EEP I*, p. 82; *II*, p. 138; *III*, p. 265 f.; *IV*, p. 423; and J. Bright, *A History of Israel* (Philadelphia, 1959), pp. 37, 48. It is becoming apparent, however, in the light of recent discoveries, that Glueck has overstated the case for the complete absence of settled life in Central and Southern Transjordan during the MB and LB periods; cf. G. L. Harding, *PEQ*, 1958, pp. 11 f., 18.

Sea. Three other kingdoms had also arisen: Ammon, centered at Rabbath-Ammon (mod. 'Ammān); Moab, extending from about the Wâdī Ḥisbān or the Wâdī Kafrein to the Wâdī el-Ḥasā; and Edom, extending from the Wâdī el-Ḥasā part way to the Gulf of 'Aqabah.

It was a conflict between the states of Moab and Heshbon which led to the first mention of Dibon in a literary source. Unfortunately the reference occurs in a passage the text of which seems to be corrupt (Nu. 21:30) but the context makes it clear that Sihon, king of Heshbon, succeeded in extending his sway south to the Arnon, and this entailed for the Moabites the loss of both Dibon and Madeba.[23]

A few years later Sihon himself was overthrown by the Israelites under Moses and all his territory, including the town of Dibon, fell into Israelite hands (cf. Nu. 21:21-5, Dt. 2:26-36, Ju. 11:18-26), being assigned to the tribe of Reuben (Josh. 13:16-25). The region farther north, namely the district between Ammon and the Jordan, and all of Gilead, was assigned to Gad (Josh. 13:24-8). However, Nu. 32:34 assigns Dibon to Gad: "The Gadites built (i.e. rebuilt) Dibon, Ataroth, Aroer," etc.[24] If Josh. 13 is trustworthy, the tribe of Reuben must have declined fairly early, allowing the Gadites to push south and take over some of the Reubenite possessions.[25] The settlement of the Gadites in Ataroth (probably Khirbet 'Aṭarūs, 14 km. northwest of Dibon) took place long before the 9th century B.C., as we learn from Mesha's inscription, line 10. If they occupied Dibon as well, as Hebrew tradition affirms, they may have lost it at the time of the revival of Moabite power under Eglon during the time of the Hebrew "judges" (cf. Ju. 3:12f., I Sam. 12:9), although they managed to maintain their footing at Ataroth.

The establishment of a strong Hebrew state west of the Jordan posed a serious threat to Moab. Exactly what it suffered at the hands of Saul is not clear since the reference in I Sam. 14:47 to Saul's struggles with the Moabites gives no details, but with the accession of David Moab was conquered and made tributary (II Sam. 8:2) and its possessions north of the Arnon came under direct Hebrew administration (cf. II Sam. 24:5). This period of Hebrew domination lasted for 60 or 70 years at least. Some time following the division of the Hebrew kingdom at Solomon's death, the Moabites recovered their former holdings north of the Arnon, including Dibon and Madeba, for later on Madeba was taken from the Moabites by Omri.

It must have been Mesha's father, Chemosh . . . , who was involved in the Moabite-Ammonite-Me'unite campaign against Jehoshaphat of Judah (873-49) which is related in II Chron. 20:1-30. But it was Omri of Israel (*ca.* 876-69) rather than Jehoshaphat of Judah who undertook to chastise the Moabites. We learn from the Mesha stele that Omri occupied "the land of Medeba," today, and probably then also, a rich grain-growing district. II Kings 3:4 adds the further information that he imposed a heavy tribute in sheep and wool on the Moabites. This humiliation is said by Mesha to have lasted for forty years, from the time of Omri to the middle of the reign of Omri's "son" (M.I., ll. 7-8). Mesha's assertion that he saw the fulfilment of his desire upon Omri's "house" as well as upon Omri himself and that "Israel has completely perished for ever" suggests that Mesha lived to see the overthrow of the Omride dynasty by Jehu *ca.* 842. If so, he is using "son" in line 8 with the sense of "grandson."[26] The combined reigns of Omri (12 years), Ahab (22 years), Ahaziah (2 years), and half the reign of Jehoram (6 years) total 42 years. Since, as Van Zyl (p. 138) points out, it is very unlikely that Omri undertook the subjugation of the Moabites in the very first year of his reign when he would be preoccupied with consolidating his position, the figure of "forty years" given by Mesha as covering the period of Israelite domination cannot be far from the truth.

According to II Kings 3:5 Mesha rose in revolt "when Ahab was dead." This must mean in the reign of Ahaziah (850-49), otherwise the verse

[23] For a discussion of v. 30, cf. J. Simons, *Geog. and Topog. Texts*, p. 263, n. 230. Glueck (*EEP III*, pp. 242f.) believes Sihon established himself in Heshbon only after his defeat of Moab, but v. 28 does not support this interpretation.

[24] According to Nu. 33:45, *Dibon-Gad* (i.e. Dibon of Gad) was one of the camping-places of the Israelites on their way to Canaan.

[25] Van Zyl (p. 133) attributes the decline of the tribe of Reuben to Moabite aggression just prior to the deliverance by Jephthah, but the Reubenites were still strong in the days of Saul (I Chron. 5:10, 18-22). I Chron. 5:5 refers to the deportation of a Reubenite chief as late as the time of Tiglath-pileser III in 734 B.C.

[26] This solution of the problem has been convincingly presented by Cross and Freedman, *Early Hebrew Orthography*, p. 39, n. 13. Van Zyl, however, refuses to accept the solution (*The Moabites*, pp. 138f.).

would read "when Ahaziah was dead." Since Ahaziah died in the second year of his reign, it fell to his brother Jehoram (849-42) to deal with Mesha. Mesha, it seems, had initiated his revolt by making a sudden attack on Ataroth (14 km. northwest of Dibon) which was taken by storm and its Gadite inhabitants massacred. Following that he attacked and captured the town of Nebo (mod. Khirbet el-Mekhayyat, *ca.* 20 km. north of Ataroth) and put its Yahweh-worshipping inhabitants to the sword.[27] Jehoram went to the aid of the remaining Israelite settlements and set up his headquarters at Jahaz (M. I., line 19).[28] The location of Jahaz has not been definitely established but Père de Vaux's identification with Khirbet Libb, 11 km. north of the Wâdī Wālā, has much to commend it.[29] Mesha claims that he drove the Israelites out of Jahaz with a force of only two hundred men. Since there is no mention of Jehoram being captured, it seems likely that the fortress was caught off guard during the winter season when the Israelite king and most of his forces were absent. The capture of the Israelite headquarters marked the triumph of the revolt and the liberation of Moab from Israelite domination.

Mesha now proceeded to build for himself and his god Chemosh an abode which would be a lasting memorial of their triumph over Moab's enemies. This new suburb, containing palace (*bt mlk*) and sanctuary (*bmt*), was added to the town of Dibon, Mesha's birthplace, as pointed out above. In the great inscription recounting his exploits, Mesha proudly proclaims: "I built Qrḥh, the wall of the parks (*hy'rn*) [30] and the wall of the acropolis (*h'fl*).[31] I built its gates, I built its towers (*mgdlth*),[32] I built a palace, and I made the retaining walls (*kl'y*) [33] of the reservoir (*h'šwḥ*) [34] for water ([*lm*]*yn*) [35] inside the town. Now there was no cistern inside the town at Qrḥh, so I said to all the people, 'Each of you make a cistern for himself in his house.' And I cut the beams (*hmkrtt*) [36] for Qrḥh with Israelite prisoners" (M. I., lines 21-6).

The building of Qrḥh and the rebuilding of the other towns mentioned in the latter part of the inscription must have occupied several years and can be most naturally dated after the deliverance from Israelite rule. The stele manifestly gives a summary of the main achievements of Mesha's reign. As pointed out above, it seems to have been erected some time after the overthrow of the Omride dynasty by Jehu (*ca.* 842). A date shortly after this, say 841 or 840, before it had become apparent that Israel had not really "perished" after all, is the most likely date for the setting up of the stele.

The history of Dibon after Mesha's time is obscure. The statement in II Kings 10:32 f. that Hazael (of Damascus) wrested from Israel her holdings in Transjordan as far south as Aroer on the Arnon implies that Jehu (842-15) had regained the territory lost by Jehoram to Mesha.

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[27] The tribal affiliation of the inhabitants is not given.

[28] The invasion of Moab by Jehoram of Israel, Jehoshaphat of Judah and the king of Edom, described in II Kings 3, involved a thrust from the south. This campaign must be placed prior to Jehoram's setting up his headquarters at Jahaz on the northern border of Moab, and prior to the revolt of Edom against Jehoshaphat's son (cf. II Kings 8:20).

[29] "Notes d'histoire et de topographie transjordaniennes," *Vivre et Penser*, I, 1941, p. 20. Van Zyl (p. 80) suggests an identification with 'Aleiyān, 10 km. northeast of Dhiban.

[30] This word may be explained either from Heb. *ya'ar*, "forest, thicket," in which case we must probably think of palace grounds planted with trees and surrounded by a wall, or from Heb. *ya'ar*, *ya'ᵉrah*, "honeycomb," in which case the reference is probably to the fact that the mound of Dibon-Qrḥh was honeycombed with cisterns.

[31] For this term, see J. Simons, *Jerusalem in the Old Testament* (Leiden, 1952), pp. 64 ff.

[32] According to Van Zyl (p. 172), it is impossible to tell from the orthography whether the word is singular or plural, but in Heb. and South Arabic, *mgdlt* is a plural form.

[33] A construct plural, probably to be explained from Heb. *kl'*, "to restrain, confine," and Ugar. *kl'atnm*, a dual form meaning "enclosures" (cf. J. Gray, *Legacy of Canaan* [Supplements to Vetus Testamentum, vol. 5], Leiden, 1957, p. 98, n. 6) rather than from Heb. *kil'aim*, "both," since the following word is in the singular.

[34] Torczyner (*JPOS*, 16 [1936], pp. 5 f.) would translate by "sacred building," and compares Sum.-Akkad. *ešmaḫḫu-ešwaḫḫu*, but the use of *'šwḥ* in seeming parallelism with *miqwah*, "reservoir," (cf. Is. 22:11) in Ben Sira 50, 3 favors the customary rendering "reservoir." The word may be related to S. Arabic *'šyḥ* (*CIS* IV, 540, 64); unfortunately the meaning of this word is unknown.

[35] The suggestion of Cross and Freedman that the doubtful word be restored as (*lm'*)*yn*, "for the spring," is unacceptable inasmuch as there is no evidence of a spring at Dhībān. The argument that "water" would be represented by *mn* rather than *myn* fails to carry conviction because of the occurrence in the inscription of *byt* as well as *bt* (cf. lines 7 and 25).

[36] Ullendorf translates by "ditches," but this is improbable since the root means "to cut off." Cf. Heb. *kᵉrûthôth*, "wooden beams."

Hence Van Zyl (pp. 145 f.) believes that the kingdom built up by Mesha shrank to insignificant proportions within a generation after his death. But it is difficult to believe that if the Israelites had succeeded in 'turning the tables' on the Moabites so soon, the triumph would not have been recorded. More probably Hazael's conquests affected only northern Transjordan. Amos 1:3 has only Gilead threshed by Hazael "with threshing-sledges of iron."

Jehu's successor, Jehoahaz, was in no position to attempt a reconquest of Moabite territory (cf. II Kings 13:1-9), and the reference to annual Moabite raids on Palestine in the reign of the next king, Jehoash (II Kings 13:20), presupposes the continued independence of Moab. With the accession of Jehoash's successor, Jeroboam II (786-46), the fortunes of Moab may have begun to decline. According to II Kings 14:25, Jeroboam "restored the borders of Israel from the entrance of Hamath as far as the Sea of the Arabah" (i.e. the Dead Sea). Edom was conquered by Amaziah and Uzziah of Judah (cf. II Kings 14:7 and II Chron. 25:5-14; 26:2), while Ammon paid tribute to Uzziah and Jotham (II Chron. 26:8; 27:5). The absence of any reference to Moab in the accounts of Israelite and Judaean expansion suggests that it managed to maintain its independence, but the independence must have been of a precarious nature.

In the 8th century Moab came under Assyrian domination as a result of the westward expansion of the Assyrian empire under Tiglath-pileser III. The fall of Damascus in 732 and the incorporation of Aram in the Assyrian empire left Moab no choice but to submit. Assyrian suzerainty probably involved little change except the annual payment of tribute and the introduction of the Assyrian state cult. Moab was allowed to retain its own kings, four of whom are mentioned in the Assyrian annals. *Salamanu* paid tribute to Tiglath-pileser III in 731 (cf. *ANET*, p. 282) and *Kammusunadbi* to Sennacherib in 701 (cf. *ANET*, p. 287). *Muṣuri* paid tribute to both Esarhaddon and Ashurbanipal (cf. *ANET*, pp. 291 and 294). *Kamashaltu* was a loyal vassal of Ashurbanipal (cf. *ANET*, p. 298). During this period Dibon seems to have continued to be the chief city of Moab, as suggested by Is. 15:2 where Moab is called "the daughter of Dibon" (reading *bt dybn* for MT *hbyt wdybn*) and by Jer. 48:18 where "the daughter of Dibon" is called upon to come down from her "glory."

The consistent loyalty of Moab to her Assyrian overlords, except for the possible withholding of tribute on one occasion from Sargon II, 720-05 (cf. *ANET*, p. 287), was one of the causes of the almost constant hostility between Moab and the Hebrew states across the Jordan, a hostility which finds expression in a number of prophetic oracles (Is. 15-16; 25:10-12; Jer. 48; Ezek. 25:8-11; and Zeph. 2:8-11).

When the Chaldaeans replaced the Assyrians as the masters of the East, the Moabites continued to 'play it safe' and became vassals of Nebuchadrezzar (605-562). They even joined in raiding rebellious Judah under Jehoiakim (II Kings 24:1-2). However, they made the fatal mistake of joining the widespread rebellion which led, among other things, to the destruction of Judah as a state in 586 (cf. Jer. 27:3). Moab seems to have escaped immediate retribution, but five years later, according to Josephus (*Antiq.* x. 9, 7), "Nebuchadrezzar marched against Coele-Syria and, after occupying it, made war both on the Moabites and the Ammonites" and made these nations subject to him. Josephus' account is not above suspicion (cf. J. Bright, *History of Israel*, p. 334, n. 24) and may be based on the prophecies in Jer. 44-49 rather than on historical fact, as Marcus believes.[37] But since no Moabite kings appear in history after this we seem justified in believing that the final destruction of Moab as a political state was indeed the work of Nebuchadrezzar.

During the Persian and Nabataean periods the leading role in Transjordan passed to the Tobiad family of Rabbath-Ammon (renamed Philadelphia in the reign of Ptolemy II Philadelphus). But in southern Transjordan a new power, the Nabataean, was arising at Petra. By the middle of the second century B.C., and perhaps earlier, the Nabataeans had extended their sway northward as far as Madeba, and Transjordan entered upon one of the most flourishing periods in its long history.[38] The Nabataeans soon found their control of the former Moabite country challenged by the Jewish Hasmonaeans who were probably haunted by memories of former Reubenite and Gadite settlement in this area. John Hyrcanus wrested Madeba from the Nabataeans *ca.* 127 B.C. (Josephus,

[37] Translation of Josephus, *Jewish Antiquities*, Vol. 6 (1951), p. 259, n. *a*.

[38] For an account of the transformation of Transjordan under Nabataean rule, see Nelson Glueck, *The Other Side of the Jordan* (New Haven, 1940), Chap. 6.

Antiq., xiii. 9,1; cf. xiii. 1,2; *B.J.*, i. 2,6), while his son Alexander Jannaeus (103-76 B.C.) took twelve towns from them, most of which were situated in the former Moabite territory (*Antiq.*, xiii. 13,5). Josephus gives two different lists of these towns (xiii. 15,4 and xiv. 1,4) but in neither does the name of Dibon (or Aroer) occur. The regions conquered by John Hyrcanus and Alexander Jannaeus in Transjordan constituted the later Peraea which, according to Josephus (*B.J.*, iii. 3,3), extended from Pella in the north to Machaerus (16 km. northwest of Dibon) in the south. Peraea is bounded on the south, he says, "by the land of Moab." It is uncertain whether Dibon belonged to Peraea and shared its fortunes under the Romans and Herods or remained under Nabataean control. The discovery of a coin of Hyrcanus II (63-40 B.C.) at Dibon (see Catalogue of Coins, no. 1) suggests that it was under Jewish control and was incorporated in Peraea. With Trajan's reorganization of the administration, Transjordan became a part of the Roman province of Arabia. During the Byzantine period Christianity became the dominant faith and numerous churches were erected.[39] With the Arab Muslim conquest in the 7th century A.D. a new era began.[40]

That the town of Dibon continued to flourish throughout this long period is attested by the presence of Hellenistic, Nabataean, Roman, Byzantine, and Arabic sherds and coins. There are only two references to it, however, in literary sources. One is in the *Onomasticon* of Eusebius, 4th century A.D. (ed. Klostermann 16, 18 ff.) where it is stated that Dibon is a very large village (κώμη παμμεγέθης). The other is in Yāqūt, *Mu'jam al-Buldān* (ii. 717), where the village of Dhibyān is said to be in the district of al-Kūrah (cf. Guy le Strange, *Palestine under the Moslems*, p. 438).

The discovery of Mesha's stele at Dhiban in 1868 aroused great interest in the site and from that time on it was visited by a number of European scholars.[41] It seemed logical to assume that a site which had yielded one inscribed stele should contain more, but no attempt at excavation was made prior to the campaign conducted there by the American School of Oriental Research in Jerusalem in 1950-51. There were several reasons for this: one was the relative inaccessibility of the site due to the bad condition of the Amman-Kerak road; another was the fact that the top of the mound was covered with a maze of Byzantine and Arab buildings.[42] These obstacles had begun to disappear by 1950. A metalled road was in process of construction, and Mr. G. L. Harding, Director of the Department of Antiquities of Jordan, had had many of the Byzantine and Arab structures removed from the top of the mound and their stones donated to the road. Thus the way was opened for archaeological examination of the site.

An additional reason for interest in Dhiban was that it was believed to be one of the few mounds in Transjordan which had been occupied throughout most of Transjordan's history; hence its excavation would yield a cross-section of the archaeological history of the country. During the years 1932-43 Nelson Glueck had made a survey of the archaeological monuments existing above ground, as a result of which he concluded that during the Middle and Late Bronze periods civilized life in Transjordan suffered an eclipse. This conclusion needed to be verified by actual excavation. He himself had excavated the Iron Age site of Tell el-Kheleifeh (Bib. Ezion-geber) at the head of the Gulf of 'Aqabah, W. F. Albright had made soundings at the Early Bronze Age sites of Khirbet Ader and Bab edh-Dhra',[43] and Crowfoot at Khirbet Balu'ah,[44] the Franciscans had also excavated Nebo (Khirbet el-Mekhayyat).[45] But no site with a more or less continuous history of occupation from the Early Bronze period down to modern times had been excavated. Thus the campaign conducted by the American School of Oriental Research in 1950-51 had two objectives: (1) the recovery of additional Moabite records; (2) the establishment of the archaeological history of Transjordan.

[39] For the churches of Dibon, see below, p. 17.

[40] For summaries of the history of Moab, see R. E. Murphy, "Israel and Moab in the Ninth Century B.C.," *Catholic Biblical Quarterly*, 15, No. 4, 1953, pp. 409-17, J. A. Thompson, "The History of Biblical Moab in the Light of Modern Knowledge," *Australian Biblical Review*, V (Melbourne, 1956), pp. 119-43, A. H. Van Zyl, *The Moabites* (Leiden, 1960), Chap. 4; E. D. Grohman, "Moab" in the *Interpreter's Bible* (New York and Nashville, 1962), vol. 3, pp. 409-19.

[41] See n. 1.

[42] Mackenzie regarded the presence of these massive structures as an almost insuperable obstacle to excavation.

[43] Cf. Ray L. Cleveland, *Petra III.*

[44] *PEFQS*, 1934, pp. 76-84.

[45] S. J. Saller and B. Bagatti, *The Town of Nebo (Khirbet el-Mekhayyet) with a brief survey of other ancient Christian Monuments in Transjordan* (Jerusalem, 1949).

2. The Excavation

The campaign fell into two stages: a sounding made during November, 1950, and an excavation on a larger scale made during April and May, 1951. The staff was as follows: F. V. Winnett (Director), J. B. Pritchard (Assistant Director, during November), D. C. Baramki (Archaeologist),[46] the three School Fellows: W. H. Morton (in charge of pottery and photography), Dr. Lucetta Mowry, and Father Roland E. Murphy, and the Honorary Fellow, John Thompson of the Archaeological Institute of Australia. Others who gave valuable assistance were Dr. and Mrs. A. D. Tushingham, Professor Walter Williams, and Professor R. B. Y. Scott. Professor and Mrs. Joseph Free of Wheaton College, and Mr. Kenneth Ogden, a student at the School, also assisted for brief periods. The surveys and plans were made by Mr. Subhi Muhtadi of Jerusalem. The workmen, up to 85 in number, were drawn partly from the local population, who belonged to the Bani Hamīdeh tribe, and partly from Arab refugees from Palestine. The expedition owes a special debt of gratitude to Mr. G. L. Harding for the constant help and encouragement which it received from him. He registered the Dibon site in the name of the Jordan Government and thereby enabled the expedition to carry on its work without becoming involved in costly and protracted litigation over questions of ownership and compensation. It was also due to his initiative that the Jordan Department of Antiquities made a special grant of JD 100 towards the cost of clearing a section of the face of the great stone wall. Grateful acknowledgement is also made of a gift of $500 contributed by the University of Toronto and a gift of £100 made by the Archaeological Institute of Australia towards the expenses of the expedition. But above all I wish to acknowledge my indebtedness to my wife who, during my absence with the expedition, assumed many of my duties at the Jerusalem School. To her this work is properly and affectionately dedicated.

For purposes of recording, a point—called point E—on the upper surface of the uppermost course of Wall 5 (see Pl. 24:1) was used as a datum to establish the relative levels of all archaeological and architectural remains on the site. It was arbitrarily given the level 100 m. in the absence of any proper survey points on the site indicating its height above sea level.

The area selected for the initial sounding was a stretch of sloping ground in *h* 19-21, 15 m. long by 5 m. wide, lying just outside the late wall which runs along the eastern crest of the mound. The object was to clear an area which might be used as a dump when excavation was undertaken inside the wall. The area was divided into three squares, I-III. Work was started in Squares I (north) and III (south), leaving Square II as a balk between them for the purpose of exposing a section of the stratification of the debris and for subsequent confirmation of the results obtained in Squares I and III.

At 2.30 m. below the top course of the wall, a buttress or battered wall, composed of small stones, was encountered. In front of it another battered wall of massive proportions, was found (see Pls. 2:1 and 3). In Square III the top of a rectangular tower appeared at a depth of 1.35 m. The late wall runs across the top of the tower. The tower itself is divided into two chambers. One of them was cleared to a depth of eleven meters without reaching bottom.

In Square II, the section exposed by digging Square I revealed seven clear strata, sloping at an angle of 13 to 39 degrees. The sherds ranged from Early Bronze through to Arabic, with Byzantine sherds being found in the lowest stratum.

The spring campaign, which lasted from April 4 to May 25, continued the clearance of the face of the great battered wall and began the excavation of an area inside the walls, immediately west of the initial sounding. In *jkl* 18-20 the apse of a Byzantine church was discovered (see Pl. 23), but owing to the presence of numerous modern graves in the vicinity, no attempt was made to clear it. Excavation in area *jkl* 21-22 uncovered the remains of a *calidarium* which had been subsequently converted into a living room (see Pl. 5:2). Abutting this room on the south was a large paved hall of Arabic date (see Pl. 6.1).

In the hope of finding occupational strata, the hall was removed and the area *kl* 21 cleared down to bed-rock (see Pl. 7:3). Unfortunately the whole area was found to consist merely of layer upon layer of fill. Although these different layers contained pottery, in none of them were occupational levels encountered. Early Bronze sherds were found in the lowest half meter, but above that

[46] The writer wishes to acknowledge his special indebtedness to Mr. (now Dr.) Baramki for his conduct of the operations in the field and for his assistance in writing up the preliminary report.

Byzantine sherds were mixed with Iron Age sherds all the way down, showing that the whole area had been filled in during the Byzantine period. The complete absence of occupational levels is difficult to understand, especially since this area was enclosed by walls, some of which are certainly of pre-Byzantine date. Perhaps there was a depression in the mound at this point, making building difficult until it was filled in.

The expedition then turned its attention to the southeast corner of the mound (*mno* 7-9) where, according to tradition, the Moabite Stone was found.[47] Both Duncan Mackenzie and Père Savignac were of the opinion that a temple to Chemosh once stood at the south-east corner. The outlines of a large structure were clearly visible, and the fact that some of the stones bore diagonal Nabataean dressing suggested that the structure was of Nabataean rather than Moabite origin. The presence of a sheikh's tomb in the center of the structure might indicate that an aura of sanctity still attached to the site. Realizing that there was insufficient time to undertake a complete clearance of the structure and that an unfinished excavation would only be a temptation to the local population to engage in clandestine excavations after the expedition had departed, work was confined to clearing the area around the southwest corner of the structure.

On the west side, two Arab rooms, similar to the Arab hall mentioned above, were found (see Pls. 8:3 and 9:1). These were cleared and removed and the area excavated to a depth of three meters (see Pl. 8:1). The debris below the Arab rooms proved to be regularly stratified except for a small area in Room 1 where the construction of a small reservoir had somewhat disturbed the stratification. Beneath the Arab-Byzantine level were layers of Roman, Nabataean, and Hellenistic sherds, under them Iron II and I, and beneath them Early Bronze. The Late and Middle Bronze periods were not represented. This section was much more productive of Roman and Nabataean sherds than the areas previously excavated, indicating the relative importance of this portion of the mound during these periods. Associated with the Early Bronze level was an apsidal wall, about 1.50 m. wide (see Pls. 8:1 and 9:3) but it was not followed up owing to lack of time.

Clearance of the southwest corner of the "Nabataean" building exposed the inner face of what seemed to be the south wall of the city (see Pl. 8:2).

[47] See n. 18.

CHAPTER I

Fortifications

1. The City Walls

In the area excavated on the east side of the mound (*f-l* 17-21) no less than five city walls were discovered, superimposed or abutting against one another. They have been numbered here in accordance with the order adopted in the preliminary report, in spite of the fact that later clearances have suggested the desirability of some revision. Until the chronological order of the walls has been established more definitely, the introduction of a new system of numbering at this stage would only create confusion. Hence the original numbering has been retained but some reasons for doubting its correctness are given below in section 3.

The earliest wall, No. 1 (see Pls. 4:2, 4 and 24:1), was discovered during the making of a cut through Wall 4 in order to determine its relationship to the other walls and to discover evidence of its date. Owing to the presence of Wall 4 above it, only limited sections of it could be cleared, namely, a small section in *h* 21, and the end of this particular section where it abuts on the square tower in *h* 19. It is an upright wall, 1.50 m. thick, built of roughly cut stones of various shapes, 25-50 cm. in length and 20-30 cm. in height. No attempt had been made to square them. The masonry was well laid, presumably in mud mortar which has completely disappeared. No evidence of the date of the wall was found, but from its position in relation to the other walls it is manifestly the earliest of those encountered.

Wall 2 (see Pls. 2:1 and 24:1) is a battered wall or glacis, erected in front of and running parallel to Wall 1. It is separated from it by what was at first believed to be a fill (see Pl. 4:3) but which subsequent excavation has disclosed to be another wall.[1] It is constructed of rough stones 15-18 cm. in length and 10-12 cm. in height. The wall was cleared along a stretch of eleven meters, and a small section was followed down to a depth of four meters from the existing top course. It is not clear whether the wall stops 1.50 m. short of the tower in *h* 19 (although this seems inherently improbable) or whether it turns east at that point and follows the outline of the tower. A trench dug around the face of the tower encountered many stones which may have been the back of Wall 2 encircling the tower. No evidence of its date was found.

Wall 3 (see Pls. 2:1; 3; 4:1; 23; 24:1) is the most massive of the walls. It is a battered wall, 2.25-3.25 m. thick, built of roughly dressed ashlar, each block measuring about 80 cm. in length and 55-60 cm. in height. The blocks are carefully laid in horizontal courses except at the corners where they are slightly tilted. Wall 3 rests against Wall 2. It was traced from a point in *h* 21 running south for 5.50 m. where it turns east and follows the outlines of the square tower, but it is not quite parallel to them. In the preliminary report (*BASOR*, No. 125, pp. 7-20) it was suggested that this, the strongest of the walls of Dibon, might well come from the period of Dibon's heyday, namely, the reign of Mesha. However, the subsequent discovery of a similar battered wall on the south side of the mound and outside a wall of Nabataean date, suggests that it is of later, probably Byzantine, date.[2] If this be so, the wall must come from a period subsequent to Eusebius (4th cent. A. D.) who calls Dibon an "unwalled town" (κώμη), though a "very large" (παμμεγέθης) one. The remains of magnificent fifth and sixth century churches at Nebo and Madeba point to that period as a time of considerable prosperity in Transjordan and therefore a likely period for the construction of Wall 3 at Dibon.

Wall 4 (see Pls. 4:2, 4; 5:4; 23; 24:1) is a battered wall, 1.70 m. thick, which is superimposed on Wall 1. It is built of stones of varying sizes, 40-60 cm. in length and 20-40 cm. in height, roughly cut and undressed, packed with small stones which have been inserted at all sorts of angles, giving the wall an untidy appearance. The width of the wall at the base is greater than that of Wall 1, thus leaving part of it hanging over the latter wall on the inside (see Pl. 4:2). The result was that the wall started to settle, necessitating the

[1] Cf. A. Douglas Tushingham, "Excavations at Dibon, 1952-53," *BASOR*, No. 133, pp. 18 and 21 f. Tushingham calls it "Wall 5 (lower)."

[2] Cf. *op. cit.*, pp. 18 and 22.

construction of a buttress against its inner face; this is true of the section in *j* 20-21 at least.

Wall 5 (see Pls. 2:1; 4; 5:4; 23; 24:1) is the wall which was visible at many points along the east crest of the mound before excavation began. It is an upright wall, 1.10 m. thick, constructed of squared stones, roughly cut but not dressed, averaging about 60 cm. in length and 40 cm. in height, and packed with stone chippings. In *h* 18-21, it is preserved to a height of six to seven courses. In Square II in *h* 20 and beginning 25 cm. below the surface, a foundation trench, 1.18 m. deep and 1.35 m. wide, which cuts through existing strata, was exposed. It seems to have been intended for the reconstruction of the top four courses. Pottery from the trench was a mixture of Early Arabic, Byzantine, Roman, Hellenistic and Iron II, making it difficult to date the reconstruction precisely. Wall 5 was built on what was believed to be a fill between Walls 1 and 2 (see Pl. 4:3) but which, as remarked above, has turned out to be an early wall (Tushingham's "Wall 5 [lower]"). Wall 5 crosses the square tower in *h* 19-18 which was evidently filled in at this time to receive it. The presence of Early Arabic sherds in the fill is evidence that Wall 5 dates from the Early Arabic period. On the south side of the tower, the three preserved courses of Wall 5 rest on earth. According to Dr. Tushingham, Wall 5 (lower) connects at the southeast corner of the mound with the south city wall which antedates the Nabataeo-Roman temple.[3]

Excavation in area *n* 8 exposed the inner face of a city wall on the south side of the mound (see Pls. 8:2 and 23). It was constructed of stones 27-34 cm. in length and 17-21 cm. in height. The lower part exhibits three set-backs which attest the care paid to the foundations. The wall manifestly antedates the Nabataeo-Roman temple at the south-east corner of the mound, for the upper preserved courses of the temple pass over it.

2. The Tower

An interesting feature of the fortifications on the east side of the mound is a tower, discovered in *jh* 18-19 (see Pls. 2:1; 23 and 24). The sides are of approximately equal length, ranging from 6.60 to 6.20 m. The walls are 1.50 m. thick and are constructed of stones 20-50 cm. in length and 20-30 cm. in height, packed with smaller stones. The outer face of the walls is plastered with a layer of mud or marly cement, 2-4 cm. thick.[4] The interior of the tower is divided into two chambers by a partition 80 cm. thick, running east-west and thus imparting additional strength. The presence of a doorway on the west side, leading on to the roof of the tower (see Pl. 2:2) is evidence that the tower is preserved almost intact. No trace remains of the means of access to this doorway from inside the city.

The north chamber of the tower was cleared to a depth of almost eleven meters without the bottom being reached.[5] Rather oddly the north wall of the chamber ended abruptly at level 93.00 where it rested on earth, whereas the south and east walls continue on down. This suggests that there was originally a depression in the mound at the point where the tower stands.

The pottery found inside the tower was not stratified and ranged from Early Bronze to Early Arabic, indicating that the tower had been filled in during the Early Arabic period.

3. The Relationship of the Tower to the Walls

The relationship of the tower to the walls poses an interesting problem. In the preliminary report it was suggested that the tower was of earlier construction than any of the walls discovered and that it must have been free-standing. But it is difficult to conceive of any possible function for a free-standing tower. Towers were erected primarily as vantage points from which a line of fire could be directed along the outer face of the wall.[6] Hence the Dibon tower must have formed an integral part of the defensive system on the east side of the mound. The comparatively shallow depth of the wadi on this side was sufficient reason for the provision of this additional defensive feature. Further clearance might disclose the presence of other towers on the east and south sides of the mound.

It is obvious that Wall 5, which runs across the

[3] Cf. *op. cit.*, p. 18.

[4] Glueck, *EEP III*, p. 104, refers to traces of plaster on the walls of Qaṣr Abū el-Kharaq and Qaṣr el-'Al, both probably of Moabite origin.

[5] Subsequent clearance of the wall to its base by Dr. Tushingham revealed the existence of bedrock at level 86.04 (*BASOR*, No. 133, p. 18). Hence the tower was at least 13 m. high.

[6] According to Vitruvius (*ca.* 30 B.C.), towers should not be placed more than an arrow's flight apart (cf. Sidney Toy, *A History of Fortification from 3000 B.C. to A.D. 1700* [London, 1955], p. 31).

top of the tower, is of later date than the tower itself. Wall 3 must also be of later date since it does not abut directly on the tower but goes around it, being separated from it by a deposit of 1.25-1.80 m. of fill. The fact that the plaster on the face of the tower extends on down below the level of the top course of Wall 3 is evidence that the face of the tower was originally intended to be exposed and not covered up by a glacis almost to its summit, as is the case today. As for Wall 2, the fact that it stops 1.50 m. short of the tower suggests that it and the tower were not contemporary constructions. To determine the relationship of Walls 1 and 4 to the tower, a sounding was made at the juncture of these walls with the northwestern corner of the tower (see Pl. 2:3). This showed that neither of the walls was bonded into the tower but abutted against it. This feature cannot, of course, be taken as evidence that the walls and tower were not contemporaneous constructions. Philo of Byzantium, who wrote a treatise on military architecture about 120 B. C., states that towers should not be bonded to curtain walls because their greater weight will create fissures in the walls, and that towers should be protected by a bastion to prevent the approach of sappers.[7] It is uncertain whether the builders of the Dibon tower were familiar with these principles of military engineering, but the absence of bonding suggests that they were. Whether they protected the tower with a bastion was not ascertained since only the upper face of the tower was cleared. The fact that both Walls 1 and 4 meet the *inner* (NW) corner of the tower, and that none of the other walls do, suggests that they and the tower have some original integral relationship. It seems probable that Wall 1 and the tower came from the same period—note that their method of construction is identical (see above)—and that some time later, Wall 1 was heightened by superimposing Wall 4 (properly Wall 2) upon it. In view of the manifestly early date of Wall 1 and in view of Mesha's explicit assertion that he provided Dibon with towers (*mgdlt*, M. I., l. 22), it does not seem unreasonable to attribute the construction of Wall 1 and the tower to this famous Moabite king.

It has proved impossible at this stage to relate all the walls discovered to the various periods of occupation revealed by the pottery.

[7] Cf. Toy, *op. cit.*, p. 31.

CHAPTER II

BUILDINGS INSIDE THE CITY WALL ON THE EAST SIDE

1. The Church

Excavation in area *jk* 18-20 inside the city walls on the east side uncovered the remains of a Byzantine church orientated to the northeast (see Pls. 5:3, 4). The presence of modern graves to the west and south made it impossible to clear more of the church than is indicated on Pl. 23. The foundations begin at level 97.70. The corners are constructed of large blocks of roughly cut stones, neither squared nor dressed, ranging from 100 to 117 cm. in length and from 44 to 50 cm. in height. The wall was constructed of smaller stones, 25-30 cm. in length and 17-25 cm. in height. The wall of the apse is 1.30 m. thick. Most of the stones of the outer course had disappeared. The foundations of the apse run, in part, over Wall 4 and abut against the north wall of the tower. A coin, possibly of Constantine I (A. D. 306-37), was found within the apse. Immediately below the surface in *k* 20 was a trefoil depression (see Pl. 5:3), measuring 114 × 82 cm. It is lined with concrete and is built over a sort of apse jutting out from the north wall of the church. It is probably the baptistry font of the church. For a more elaborate font, with a quatrefoil depression, see S. J. Saller, *The Memorial of Moses on Mount Nebo*, II (Jerusalem, 1941), Pl. 47.

Some architectural fragments, especially a chancel screen, found in *jkl* 21-22 doubtless came from the church and were reused in walls of Arab structures when the church was destroyed. Small finds in this area comprised a ring (see Catalogue of Small Objects, No. 2) and a chisel (*id.*, No. 16).

To the south of the church, in *j* 17-18, some flagstones were discovered (see pl. 23) but their relationship to the church was not apparent.[1]

2. The Bath

In *jk* 22 and the area to the north, there are the remains of a large building, consisting of several rooms, which seem to be of Byzantine date. In view of the fact that this part of the mound had been used as a cemetery in recent times, it was possible to examine one room only, namely that situated in *kl* 21-22 (see Pls. 5:1, 2; 23 and 24:2). Even this operation necessitated the removal of several burials and their reinterment in the cemetery south of the mound. The room examined measures approximately 6.30 m. east-west by 5.20 m. north-south. The foundations are laid on a marly fill and start at level 97.65. The walls, composed of roughly dressed ashlar, are about 90 cm. thick and are preserved to a height of 3.70 m. The accompanying elevation (Pl. 24:2) indicates the size of each individual stone.

Clearance of the interior disclosed that the room had originally served as a *calidarium*, with a hypocaust below the floor. Judging from a line of plaster still adhering to the west wall, the floor of the *calidarium* was at about level 99.30. The furnace, which was a small barrel vault, lay under the north wall of the room. In each of the four corners of the room was a round recess cut in the masonry for a pottery chimney (see Pl. 5:1). Many grey-buff curved sherds with nearly flat, slightly out-turned rims and blackened on the inside which were found beneath the floor-level of the *calidarium* are manifestly fragments of flue tiles. A number of white tesserae, 2 cm. square or larger, found both in *k* 22 and *l* 21, presumably came from the floor of the *calidarium*. Although no definite evidence of date was found, the *calidarium* probably belongs to the Byzantine period.

It was eventually converted into a dwelling room, the hypocaust being destroyed and filled in and a new flagstone floor laid at a lower level (99.00). Over the furnace, a door, 85 cm. wide, was inserted into the north wall, thus removing all traces of the water tank that may once have stood there. The stone, shown with the meter-stick on Pl. 5:1, has a hole running through it at right angles to the meter-stick. It is probably the only surviving element from the roof of the former hypocaust.

The sherds found in the bath ranged from Roman (1 rouletted sherd) through Nabataean

[1] For other churches at Dibon, see S. J. Saller, "Un antica chiesa cristiana a Diban in Transjordiania," *Rivista di archeologia Cristiana*, 15 (1938), pp. 160-2; and A. D. Tushingham, *BASOR*, No. 133, pp. 15-17 and Fig. 3.

and Byzantine to Medieval Arabic, including some fine pieces of green, yellow, black, and blue glazed ware. The presence of Arabic Sinjīl ware (see Pl. 13:6, 7) beneath the new flagstone floor is evidence that the conversion of the bath into a dwelling took place no earlier than the Medieval Arabic period. Two Ottoman coins (of Maḥmūd II, 1255-77 A. H. = A. D. 1839-61) were found in the bath, one in a hole in the center of the floor where a flagstone had been removed.

Architectural pieces found in the bath consisted of a lintel, a stone with a chequered diamond pattern (see Pl. 10:1), and a marble stone whose surface bore a curious pattern made with a comb pick, possibly designed merely for holding a coating of plaster (see Pl. 10:2). A second fragment of lintel was found in area *l* 22, immediately west of the bath.[2]

3. The Hall

At some period, a hall was added on the south side of the *calidarium*. This hall covers most of squares *jkl* 20-21 (see Pl. 23) and measures 12.90 m. from east to west and approximately half of that (6.30 m.) from north to south. The south wall of the *calidarium* was made to serve as the north wall of the new hall, but since it was not long enough to meet the larger dimensions of the hall, an extension had to be added to it on the west, the extension abutting against the former. The walls vary in thickness, the west wall measuring 60-85 cm., the east 81-86 cm., and the south 101 cm. The latter wall is constructed of larger stones than the other two. The masonry varies considerably, and there seems little doubt that it was quarried from earlier buildings on the site. Some stones are well squared and dressed, while others are polygonal and roughly cut. They are packed with small chippings and plastered with mortar which contained ash and very small chippings and served as a foundation for a coat of lime plaster.

For purposes of roofing, the hall was divided into six bays by pilasters built against the north and south walls (see Pl. 6:1, 2, 5). All the pilasters constructed against the south wall are bonded into that wall from the foundation upwards (see Pl. 7:2), but in the north wall, only the fifth course from the top of the wall, i. e. the course immediately below the floor, was bonded into the existing wall (see Pl. 7:1). All the courses above that abut against the wall, forming straight joints with it. This feature indicates that the hall was erected subsequent to the construction of the *calidarium*. Each pair of opposite pilasters was spanned by an arch, a few voussoirs of which were found in the debris. In addition, many flagstones, sufficiently long to span the spaces between the arches, were also found.[3] This method of construction has been met with in late Byzantine and Arabic buildings in the Negeb at Esbeiṭa, ʿAbdah, ʿAujā el-Ḥafīr and Kurnub.[4]

The hall was paved with flagstones, six of which bear the Greek letters *B, O* and *T* (see Pl. 12:4). Some of the flags near the east end of the hall had been looted, but their sizes and positions were indicated by impressions left in the mortar. The flags were in all probability procured from some earlier construction.

Bits of plaster were found adhering to the face of the west wall and the northeast corner, indicating that the walls and pilasters had once been covered with plaster. The preserved layer is scored with oblique notches, apparently for keying a second coat of plaster (see Pl. 6:3).[5] The outside face of the south wall also seems to have been plastered with mud and lime.

The hall had two doors, one 1.50 m. wide near the northeast corner (see Pl. 25:1), communicating with the building lying to the north, and the other 85 cm. wide at the northwest corner, opening presumably on to a street or court. At a later date the doors had been blocked up and the hall separated from the larger building to the north. This alteration doubtless dates from a period when the fortunes of Dibon were in decline. A burnt layer found in the hall, 20 cm. thick, and beginning 19 cm. above the pavement, suggests the final fate of the building.

The pottery found in the hall belonged to the Arabic period (for two examples, see Pl. 17:2, 4). Objects found in the hall include a ring, a perforated stone, and a carnelian intaglio (see Pl. 19, nos. 3, 17, and 5). Some tesserae, measuring from 3.5 to 1.7 cm., probably came from the bath to the north. The pottery from immediately below the

[2] For a bath of Roman date, see J. B. Pritchard, *Jericho II*, pp. 10-12; for one from the Byzantine period, see D. C. Baramki, "A Byzantine Bath at Qalandia," *QDAP*, II (1932), pp. 105-109.

[3] The space which they spanned averaged 1.25 m.

[4] For Esbeiṭa, see Colin Baly, "S'baita," *PEFQS*, 1935, pp. 171-181.

[5] Cf. *PEF Annual*, No. 5, p. 48.

pavement of the hall, i.e. below level 99.70, was Nabataean and Byzantine. Hence the hall cannot be dated earlier than the Byzantine period. In view of the fact that the *calidarium* immediately to the north had been converted into a dwelling in the Medieval Arabic period, one might be inclined to regard the construction of the hall as being part of the new arrangement of this area. However, if it had been erected at such a late date, the presence of Early Arabic sherds under the floor might reasonably be expected. As it is, only one Arabic sherd was found, in *l* 21 at level 99.06-98.84, and it is not certain whether it came from beneath the pavement or from the area immediately to the west. However, the method of construction employed suggests that the hall dates from the late Byzantine or early Arabic period. Small objects found below the pavement comprised an iron arrowhead and a cylinder of mottled stone (see Pl. 19, nos. 13 and 18).

4. The Excavation below the Hall

The hall was removed and the area cleared down to bedrock in the hope of finding occupational strata (see Pl. 7: 3), but the whole area was found to consist merely of layer upon layer of fill. Rock was struck at 11.65 m. from the surface, i.e. at level 89.70. The pottery encountered ranged from Early Bronze to Arabic but was mostly of the Iron Age. Nabataean sherds were encountered as far down as level 96.36-96.04. One Byzantine sherd occurred at level 94.13, suggesting that the fill is of late date, but the sherd may be intrusive.

CHAPTER III

Structures at the Southeast Corner of the Mound

1. The Nabataeo-Roman Temple

The second area selected for excavation comprised squares *mno* 7-9 at the southeast corner of the mound where the outlines of a large structure, measuring approximately 19 meters on each side, could be clearly distinguished. From the fact that some of the stones bore Nabataean dressing (see Pl. 9:4) it was assumed that the building was of Nabataean origin and it was so designated in the preliminary report. However, subsequent examination disclosed that the building consists of two shells, an inner one of Nabataean origin and an outer one of Roman date, the latter incorporating some materials from the earlier structure.[1] A number of architectural pieces of Nabataean workmanship found immediately to the west may safely be regarded as having come from the Nabataean building. They comprised three bases for free-standing rectangular piers (see Pl. 10:3, 4, 6); for similar bases, cf. Nelson Glueck, "The Nabataean Temple of Khirbet et-Tannūr," *BASOR*, No. 67, p. 8, Fig. 3); three round, molded bases (see Pls. 11:5, 6 and 12:2), and a capital (see Pl. 10:5, photographed upside down; cf. Kammerer, *Pétra et la Nabatène*, Atlas, Pls. 70 and 71). Other architectural fragments from this area included part of a marble molded cornice (see Pl. 11:1), a second cornice fragment (Pl. 11:2), a lintel fragment decorated with a cross (Pl. 12:1), and a fragment of a basalt press or possibly an offering table (Pl. 12:3). The fragment of a colonnette from a balustrade and the column drum shown on Pl. 11:3, 4 came from area *l* 8. From *m* 8-9 came a number of iron nails, some of which are shown on Pl. 19:14.

Owing to the limited time available, the work at the southeast corner of the mound was confined to clearing the southwest corner of the Nabataeo-Roman temple. The west wall proved to consist of three heavy foundation courses on which rested two courses of blocks measuring from 51 to 93 cm. in length and from 43 to 48 cm. in height, followed by a splayed string course 21.5 cm. high, with a set-back of 15 cm. Above it, five blocks, bearing Nabataean dressing, were all that remained of the superstructure (see Pls. 8:1, 9:4, and 25:2). The three foundation courses of this west wall of the Nabataeo-Roman temple abut on the south city wall. The upper courses run out over this wall (see Pl. 8:2), proving that the wall antedates the temple.

[1] This view is denied by G. R. H. Wright, "The Nabataean-Roman Temple at Dhiban: A suggested Reinterpretation," *BASOR*, No. 163 (1961), pp. 26-30.

2. The Arab Rooms

Clearance of the west wall of the temple uncovered a paved room adjoining this wall on the west (see Pls. 8:3 and 22). The room was irregular in form, the east wall measuring 7.20 m., the west 7.50 m., the north 4.50 m., and the south 5.60 m. The walls are 85-90 cm. thick, the masonry being laid in headers and stretchers. The room is divided into five bays by four pilasters built up against the east and west walls and spaced about 60 cm. apart. The pilasters on the east side abut against the east wall, while those on the west side are bonded into the west wall. Some of the voussoirs and roofing slabs which once spanned the pilasters were found in the debris.

A second room abuts Room 1 on the west (see Pl. 9:1). It is of similar construction but was only partially cleared. Two pilasters with a stone seat between them were partially preserved along the east wall.

The walls of Room 1 and 2 rest on an earlier and extensive flagstone pavement. The fact that gutters had been cut in this pavement sloping toward the west suggests that the pavement once stood in an open court. The presence of Byzantine sherds in the mortar in which the flagstones were set shows that the pavement is not earlier than the Byzantine period. The further discovery of Arabic sherds beneath the pavement shows that the room must be dated to the Arab period. An Arabic date was also indicated by the presence of Arabic sherds in the west wall and of Arabic and Byzantine sherds in the north wall. A coin of Maurice Tiberius (A. D. 582-602) and an undated Umayyad coin (see Catalogue of Coins, nos. 12 and 15)

were found immediately above the floor. The many chunks of iron found in *m* 8-9 are shown to be Arabic by the fact that one of them encased a sherd of Mefjer 9 ware (see Pl. 18:17). Under the floor of Room 1 was a small reservoir lined with cement from which two basketsful of Arabic sherds encased in plaster were removed.

Abutting the south wall of the temple were other Arab structures, one with a sloping gutter designed to carry water away from the south wall (see Pl. 9:2), but these structures were not followed up.

The two Arab rooms mentioned in the preceding paragraph were removed and the area excavated to a depth of three meters. The debris below the rooms proved to be regularly stratified except for a small area under Room 1 where the construction of the small reservoir had disturbed the stratification to some extent. Beneath the Arab-Byzantine level (Stratum I, 28 cm. in depth) was a layer (Stratum II, 27 cm. in depth) containing Hellenistic, Roman and Nabataean sherds. Stratum III was a layer of mortar 5 cm. thick, which may represent the floor level of the Nabataean period. Stratum IV was 1.16 m. deep and contained Iron II sherds and reddish-brown sun-dried bricks. Below it was a 5-cm. strip of yellow earth (Stratum V), which presumably indicated the floor level of Stratum IV. Stratum VI, 86 cm. in depth, yielded Iron I sherds. It is separated from Stratum VIII by a thin strip of grey earth, Stratum VII. An apsidal wall, about 1.50 m. wide, was found associated with the Early Bronze level in Stratum VIII at level 98.00 (see Pls. 8:1 and 9:3). It was not completely excavated owing to lack of time.

The most striking feature of the stratification in this area is the absence of Middle and Late Bronze sherds. In the excavation conducted on the east side of the mound, some sherds, believed to be Middle or Late Bronze, were found, but they were extremely rare. Thus the results of the first season's work at Dibon tend to support the conclusion, reached by Nelson Glueck from his great surface survey, that during the Middle and Late Bronze periods settled life in central and southern Transjordan suffered an eclipse.[2]

[2] See p. 7, n. 22.

CHAPTER IV

A Tomb

Attempts to discover the necropolis of ancient Dibon proved a failure, although one tomb was found on the south bank of the wadi which runs in from the east towards the north end of the mound. The entrance was framed by two rough walls resting on a sill and surmounted by a lintel (see Pl. 12:5). A shallow depression immediately inside the entrance marked the site of a burial, while a second deeper cavity farther in and at right angles to the first (hence orientated E.-W.) marked the site of another, and probably earlier, burial. An elderly Arab informed Professor R. B. Y. Scott, who supervised the clearance of the tomb, that the cave had been cleared about thirty years ago by some Bedu who intended to use it as a cistern but found it too shallow. This explains why nothing of interest was found.[1]

[1] For a remarkable tomb of Roman date situated just east of the modern highway at Dhiban, see Bliss, *PEFQS*, 1895, pp. 222 ff.

CHAPTER V

Fragment of a Moabite Inscription

One of the most interesting discoveries made during the first season was a fragment of a Moabite inscription (see Pl. 12:6). It was picked up on the surface on the northeastern part of the mound (see Pl. 22, square *zp* 29) [1] by a visiting American student, Richard Palmer, and published by Professor Roland E. Murphy in *BASOR*, No. 125 (1952), pp. 20-3. The inscription consists of two lines of three letters each, engraved on a piece of grey-black basalt measuring approximately 4 cm. in width and 5 cm. in height, broken away on all sides. Professor W. F. Albright has suggested (*op. cit.*, p. 22) that the top line is to be restored to read (')*šwḥ*, "reservoir." The second line is clearly ...*bt.k*.... which is either a place-name, "Beth K..." (although no Moabite town with a name beginning with these letters is known) or, more probably, is to be interpreted as "the temple of Ch(emosh)." The most exciting feature of the inscription is the form of the *kāph*, the medial stroke of which is entirely straight rather than terminating in a curved tail as in the script of the Mesha stele. This shows that the inscription is not one of the small fragments of the Mesha stele which are still missing, but belongs to some royal building inscription yet to be discovered.[2] Albright would date the new fragment to the first half of the ninth century B.C. and hence before the Mesha stele. If this date be correct, Dibon must have been deemed worthy of receiving royal monuments before Mesha's time. The fragment is preserved in the Amman Museum.

[1] The word "Fragment" which appears in several other places on plate 22 marks the spots where pieces of polished but uninscribed basalt, which might have belonged to a stele, were found.

[2] That the Mesha Stele was not the only inscribed monument left by the Moabites was confirmed by the discovery in 1959 by Mr. G. L. Harding of a fragmentary three-line inscription which mentions a hitherto unknown Moabite king. See W. L. Reed and F. V. Winnett, "A Fragment of an Early Moabite Inscription from Kerak," *BASOR*, no.172 (1963), pp. 1-9. The discovery of this inscription gives ground for believing that intensified archaeological research in the Moabite area would lead to the recovery of important historical records.

CHAPTER VI

The Pottery

The failure of the first season's campaign to find significant stratified deposits, except for a small area at the south-east corner of the mound, makes it impossible to present any useful, detailed discussion of the Dibon pottery at this stage. Accordingly, a fuller treatment of the subject is being left to Professor Reed in his report on the second season's work (see below, Part II). All that is attempted here is to give a few characteristic (as well as a few unusual) pieces in order to give some idea of the archaeological history of the mound and the relationship which the Dibon pottery bears to the pottery of other sites.

Naturally most of the pottery encountered in the first season's work was Arabic and Byzantine. The closest parallels to it are to be found at Mount Nebo, but there are some connections with the wares of Beth-shan, Herodian Jericho, Khirbet el-Mefjer and Abū Ghōsh. At least one interesting parallel with Jerash ware was noted (Pl. 17:5). A frequently recurring bowl was the carinated type illustrated on Pl. 17:6-8.

Nabataean sherds were encountered in considerable numbers, especially at the southeast corner of the mound, although they were by no means rare along the east side. Some Roman rouletted and terra sigillata sherds also appeared. One terra sigillata sherd was practically identical with that illustrated in *QDAP* IX, p. 128, No. 82. Iron Age sherds occurred sporadically at all levels in the debris on the east side of the mound, in the tower, and in the stratified area at the southeast corner. Besides red-burnished, brown-burnished, and black-burnished ware, there were fragments of black-burnished perfume juglets, and sherds painted with red bands over a cream slip. The handle with the painted trellis design, shown on Pl. 14:6, is particularly noteworthy, as are the painted sherds shown on Pl. 13:1-5. A few sherds which may be of Middle Bronze and Late Bronze date were found on the east side of the mound and in the tower, but they were too nondescript in character to make a definite assignment of date possible. The large sherd of creamy ware, painted with yellow and black lines, shown on Pl. 13:4, is very unusual. The Early Bronze and Chalcolithic periods were represented by a not inconsiderable number of plain and wavy ledge-handles and disc bases (see Pl. 14:1-4), these being found in the tower and in the deep excavation under the hall.

Catalogue of Pottery

Plate 13

1. In-turned, out-turned rim of hard-baked ware; brown and black bands on outside and bars of reddish-brown on rim, over a light buff slip; cf. the Edomite ware in Glueck, *EEP II*, pp. 124-137 and Pls. 27A and B.
2. Out-turned rim and side of bowl; bands of reddish-brown on side and bars of same on rim, over light buff slip; see no. 1.
3. Two red stripes, with intervening black stripe, over a pinkish slip; cf. the painted Moabite ware in Glueck, *EEP* I, pp. 14-22 and Pls. 20, 22-24, and *EEP III*, p. 266 and Pl. 19.
4. Soft whitish ware with zigzag and bands of yellow (or light brown) and black over a cream slip; cream slip on inside also; probably Moabite.
5. Sherd with one straight and one wavy line in red; coarse ware with many lime grits, dark pink slip. From tower, level 92.80. Iron.

6-7. Very coarse ware with geometric design in black over cream slip; cf. the post-13th cent. A. D. ware from 'Athlit (*QDAP*, V, 1-2, Pl. 28 and p. 54), and Glueck, *EEP III*, p. 267 and Pl. 22:3.

8. Very coarse ware, brushed and painted with trellis design in red; probably Medieval Arabic.

9-11. Well-levigated and well-baked ware with slight ribbing; lines of red paint on a pinkish or light buff slip; cf. the red painted Nebo ware of the 6th-7th cents. A. D.

12. Painted with brown stripes over a cream slip. From near surface; probably Arabic.

13. Design in brown (or red) over cream slip; Mefjer 9 ware; cf. *Mefjer*, Figs. 6: 2, 6; 7:13 and 9:3, 10.

14. Design in red over purplish-white slip; Mefjer 9 ware; cf. *Mefjer*, Figs. 6:4 and 9:2, 4, 11.

15. Design in brown (or red) over cream slip; Mefjer 9 ware; cf. Glueck, *EEP III*, p. 267 and Pl. 22:4.

[1] The descriptions of the pottery fragments are based largely on the field-notes of Prof. Morton.

16. Straight and wavy lines in light brown over cream slip; Arabic. *n* 9-10, level 100.60-100.49.
17. Two lines of brown over cream slip; well-levigated and well-baked ware; Arabic.
18. Polychrome enameled ware. A second fragment of the same bowl (not illustrated) shows the pattern to be the same as that of *Abū Ghōsh*, I, Fig. 1:3 (10th-11th cent. A. D.).

Plate 14

The sherds are numbered from left to right, beginning with the top row.

1. Plain ledge handle, Chalcolithic—EB; cf. *EEP III*, p. 252 and *IV*, pt. 2, Pls. 1:2-4:7 and 44, 45.
2. Knob handle; cf. the similar Moabite handle in *EEP II*, Pl. 26A:2.
3. Pushed-up and folded-over (or pinch-lapped) ledge handle; pink ware thickly speckled with large lime grits; cf. *Jericho II*, Pl. 29:4 and *EEP III*, Pl. 5.3.
4. Pushed-up and folded-over ledge handle; red ware, burnished. Iron.
5. Rim fragment with thumb-indented band below rim; cf. *Jericho II*, Pl. 26:5 and *EEP III*, Pl. 8:9. Chalcolithic—E. B.
6. Handle, oval section. The trellis design, consisting of a vertical line of dark brown and transverse bars of lighter brown paint, is specially characteristic of Edomite ware, but is also found in Moab (cf. *EEP II*, p. 129 f.; *Tell Beit Mirsim III*, Pl. 12:3 and p. 35; and *Naṣbeh II*, Pl. 87).
7. Handle with wide groove down middle; well-levigated reddish ware; Nabataean (?).
8. Loop handle with geometric design in black over cream slip. Arabic.
9. Fragment of small cooking pot with horizontal loop handle composed of two concentric rings; red slip. Arabic.
10. Similar to no. 8. *n* 9, level 102.54.
11. Large loop handle with six deep grooves; hard pink ware. Late Byzantine.
12. Neck and loop handle of jar; whitish ware with cream slip; ribbing on neck. A somewhat similar juglet at *Mefjer* (Fig. 14:11) is dated by Baramki to the 12th-13th cent., but the white ware at Abū-Ghōsh belongs to the 10th-11th cent.
13. Large loop handle with groove down the middle and symbol on top (Text figure 1); reddish

ware with buff slip. Late Byzantine. *n* 8, level 101.

Plate 15

1. Shoulder of jug with three oblique nicks; hard pink ware with light brown slip. The decoration with incised nicks is found most commonly on late 6th century and early 7th century A. D. ware; cf. *Nebo II*, pp. 96-102. Kelso (*AASOR* XXIX-XXX, 1955, p. 33) states that similar nicks are also found on Arabic ware. A specimen from el-Jīsh is dated by N. Makhouly to the 4th-5th century A. D. (*QDAP*, VIII, Pl. 30:1, g).
2. Shoulder of jug with four oblique nicks; hard pink ware with grey core; see no. 1.
3. Inturned collared rim of bowl; incised wavy line on top; oblique impressions along outer edge; hard reddish ware with buff slip. *Nebo II*, Pl. 152:31 and *I*, p. 78, No. 311, is somewhat similar; cf. *Beth-shan II*, Pl. 32:21.
4. Shoulder of jug; vertical incisions at point of junction with neck; surface covered with incised vertical and diagonal lines of notches; reddish-brown ware with whitish slip; cf. *Nebo I*, Pl. 155:24-28, and *II*, pp. 97-102, where Schneider dates them from the end of Byzantine on into Arabic.
5. Rim and neck of jar; two incised, horizontal zigzag lines over whitish slip with patches of dark-colored slip; hard red ware; cf. Crowfoot and Fitzgerald, *PEF Annual* V, Pl. 15:28 (late 6th or early 7th cent.) and *Jericho II*, Pl. 51:2. *l* 8, level 100.70-99.80.
6. Rim fragment of cup with single wavy incised line; reddish-buff ware; cf. *Nebo I*, Pl. 156:10-15, and *II*, pp. 110-118. Schneider (p. 118) says: "The decoration on the cups with the wavy incised line, therefore, may be dated at Siyâgha as at Jerusalem, Beth-shan and Mefjer to the end of the Byzantine period and the beginning of the Arabic period." Lane, *Early Islamic Pottery*, Pl. 3, dates a jar with this decoration from Susa to the seventh or eighth century A. D.
7. Similar to no. 4. *n* 9, level 100.23.
8. Reddish ware with cream slip, with diagonal lines of triangular indentations made with pointed instrument; cf. *Mefjer*, Pl. 21:7, 9 and *Petra II*, Pl. 27:214 and p. 155. Fitzgerald, *Beth-shan II*, p. 36, says: "A characteristic form of decoration in the Arab period consists of patterns scratched with a pointed instrument on the surface of the clay before baking."
9. Fragment of straight-sided bowl; outer surface divided into panels embellished with geometric pattern incised with knife; vertical ridge handle; pink ware with cream slip (?); possibly a degenerate version of *Mefjer*, Fig. 6:21 (Pl. XXI:7), 24 (8th cent. A. D.). Cf. also *Beth-shan II*, p. 36 and Pl. 33:20, 27, 31.
10. Two fragments of bowl with incised zigzag decoration on side and nicks on shoulder; sides of bowl project below base, forming a stand; hole through stand to allow escape of heat (?); light reddish-brown ware with whitish slip on outside. Arabic.
11. Collar and shoulder of jar with ridge at juncture; incised criss-cross pattern on collar; vertical lines of notches on shoulder; light brown ware with cream slip on outside. The closest parallel

is *Nebo I*, Pl. 155:35, and *II*, pp. 98 and 101 (from end of Byzantine to early Arabic).

12. Fragment of jug, brownish-red ware with cream slip; horizontal combing, criss-cross incisions made with a knife, and vertical notched line; cf. *Nebo I*, Pl. 155:13 and 36, and *II*, pp. 97 f. and 102 (late Byzantine or early Arabic).
13. Fragment of jug, decorated with incised lines; brownish-red ware with buff slip. Arabic.
14. Carinated shoulder with incised decoration and one horizontal band of combing; light red ware with white slip; cf. *Nebo I*, Pl. 157:45 and 155:38.
15. Fragment of large basin with combed decoration; light red ware with whitish slip or wash; inside surface irregular; cf. *Nebo I*, Pl. 152:17a, b, and *II*, p. 77. Schneider (p. 80 f.) dates the Nebo basins with combing from about the close of the 6th century to about the latter half of the 7th century. Cf. *Jericho II*, Pl. 51:3.
16. Similar to No. 15 but reddish-buff ware.
17. Rim and side of large basin; out-turned rim; wavy combing; light pinkish ware with cream slip inside and out; cf. *Mefjer*, Fig. 10:2 (12th-13th cent.); *QDAP*, X, 1, Fig. 7:6 (early 4th century A. D.); *Nebo II*, p. 81 (early 6th to early 7th cent.); and Jerash, *AASOR*, XI, Pl. 13:x20 (*ca.* A. D. 600, Schneider, p. 80).
18. Fragment of bottle; out-turned rim, faint ribbing; line of wavy combing; brownish ware with traces of cream slip. The form resembles *Mefjer*, Fig. 15:4, which Baramki dates to the 12th-13th centuries. Cf. also *Petra II*, Pl. 9:18 (Nabataean, 1st-2nd cent. A. D.).

Plate 16

1. Black burnished sherd of coarse greyish ware. From inside the tower at level 94.60-94.25. Chalcolithic or E. B.
2. Coarse, poorly baked ware with lime and flint grits; light buff slip; red lines around collar and oblique red lines on body. Iron.
3. Bands of red paint over light brown burnished ware. Possibly LB.
4. In-turned rim, porous ware, horizontal burnishing inside and out. Iron I.
5. Fragment of plate; light grey ware, red inside with vertical burnishing inside, and irregular band of red paint on under side of rim. Iron I or II.
6. Bowl fragment; coarse grey ware with bands of red paint over cream slip. Iron I.
7. Flanged rim of bowl with groove in rim; sharp ridge at shoulder; hard pink ware. Late Byzantine.
8. Coarse ware with wide band of red paint over pink slip. Iron II (?).
9. Bowl fragment; ribbing down to carinated shoulder; fine pinkish ware with chocolate slip inside and on rim. Byzantine.
10. Bowl fragment; ring base, reddish ware with grey core; shallow grooves of lighter color on outside.
11. Cup fragment, with circular burnishing; hard red ware; cf. *Nebo II*, Fig. 13:14 (end of Byzantine and beginning of Arabic), and *Abū Ghōsh I*, p. 19 and Fig. 2:1, 2, 3, 7 (10th-11th cent.).
12. Fragment of plate, ring base; Eastern sigillata with reddish-brown slip; cf. *Petra II*, 36 and 86 and Pl. 16:86 (2nd cent. B. C.) *n* 8-9, level 99.85-99.69.
13. Rim and neck fragment of large jar; well levigated and baked, grey interior; light buff slip inside and out. *l* 8-9, level 101.55.
14. Grooved and flanged rim of large cooking pot; ribbed; pinkish-buff ware with grey slip. Byzantine.

Plate 17

1. Out-turned rim of large jar with row of indentations below rim and criss-cross brush mark; hard pink ware. Arabic.
2. Heavy out-turned rim with deep groove under rim and deep finger-nail impressions around neck; well-baked light buff ware. Arabic.
3. Collared rim of large storage jar; indentations around neck; reddish-buff ware with lime and flint grits. Arabic.
4. In-turned rim of large vessel with oblique thumb impressions around rim; coarse buff ware, black inside. Arabic.
5. Bowl fragment; rim pushed up and scalloped by pressing tool with tapered point around edge; band of wavy combing on side with traces of triangular impressions below it; very hard, grey-black ware; cf. Jerash, *AASOR*, XI, Pl. 13:x3 and p. 35 f. (A. D. 500-600) *n* 9, level 100.23.
6. Rim with inside groove and out-turned flange, deep curve round to shoulder carination; hard, well-baked buff ware with chocolate slip on rim and brown slip below. Byzantine.
7. Out-turned, flanged rim of bowl, with ridge at shoulder and slight ridge inside rim; coarse ware with small lime and flint grits. Arabic.
8. Bowl fragment; flanged collar with groove below collar, and combing on rim and sides. Arabic.

Plate 18

1. Lamp fragment; ring around feeder; decorated with circle of pellets and radial strokes; knob handle on upper side; cf. *Nebo I*, pp. 326 and 323 f. (4th-8th cent. A. D. or even a little later); *Mefjer*, Pl. 17:7 and p. 73 (8th cent. A. D., Baramki), and *Naṣbeh II*, p. 60b. *n* 9, level 101.96-100.23.
2. Lamp fragment; two rings around feeder; decorated with pellets and radial strokes. Square III.
3. Lamp fragment; two rings around feeder; upturned handle (broken) at back; decorated with round arches, each containing a pellet; the same

decoration appears on lamps (handleless) in *Nebo I*, Pl. 143:74, and *Jerusalem, North Wall*, Fig. 23:9 (probably 6th century A.D., p. 45). *n* 8, level 101.00.

4. Fragment of candlestick lamp; cf. *Nebo I*, pp. 323 f. (4th-8th cent. or later), and *Silet edh-Dhahr*, Fig. 48-58. Crowfoot and Fitzgerald, *PEF Annual*, V, p. 92, say that the candlestick type was common in the 6th cent. A.D. *h* 21, level 99.90-99.74.
5. Fragment of channel-nozzle lamp; grey ware with cream slip; volute design, each line terminating in a pellet; cf. *Nebo I*, p. 326.
6. Disc base of lamp(?) with quatrefoil design in circles; Nabataean or Byzantine. *n* 8, level 98.34-97.8.
7. Fragment of lamp(?); cf. *Naṣbeh II*, p. 58b. *n* 8, level 99.65.
8. Lamp fragment, red slip ware with grey core; depressed discus; stamped decoration of circles and pellets; Roman-Nabataean. *n* 8, level 99.40-98.60.
9. Lamp fragment, reddish ware, depressed discus, decorated with circles and straight lines along edge. *l* 8, level 99.83.
10. Lamp fragment with stamped decoration; knob handle; Roman. *n* 8, level 99.65.
11. Lamp(?) fragment with stamped decoration; Late Byzantine. *k* 21, level 100.72-100.10.
12. Flanged collar (?) of jar; rouletting on top; well levigated and baked reddish ware with similar slip; traces of black slip decoration; Roman or Nabataean. *n* 8, level 99.40-98.60.
13. Unidentified heel-shaped pottery object; slightly depressed surface; fine grained reddish ware. *j* 21, level 100.13-100.47.
14. Similar to above.
15. Hollow pan handle, tilted upwards; smoke-blackened on outside; fine grained reddish ware; cf. *Nebo I*, Pl. 150:23, 24 and *II*, p. 55 f. (6th and early 7th cent. A.D.), and *Mefjer*, pp. 71, 74 (8th cent.). *n* 9-10, level 100.60- 100.49.
16. Fragment of legged bowl; coarse reddish ware with lime and flint grits; unevenly baked; grooves on inside of rim; diameter 50 cm.; Iron; cf. Harding, "Two Iron Age Tombs, 'Amman," *QDAP*, XI, Pl. 17:10-12. Square I.
17. Sherd of well-levigated, well-baked ware with red (or light brown) stripe over cream slip, embedded in plaster with iron rust. The ware may be Mefjer 9. *n* 9, level 101.96-100.23.

Catalogue of Small Objects

Plate 19

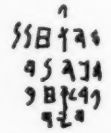
1. Ring, composed of two bands of iron and one of copper, embellished with red, green and silver beadlets; iron bezel. *h* 21, level 99.16.
2. Ring, silver, with corded wire mount for setting; clasp at each end of mount. *j* 19, level 100.29.
3. Ring, silver, blue stone setting mounted in flat band bound with corded wire. *j* 21, level 99.67.
4. Red beads.
5. Intaglio, carnelian, showing draped and helmeted female figure of Athena (?) holding shield and spear in right hand and unidentified object in left hand. Length 1.3 cm. *k* 20, level 100.05.
6. Blue beads.
7. Bone beads.
8. Bone pin, *m* 9, level 100.61-100.24.
9. Cowrie shells. Below floor of hypocaust (*l* 22), level 98.80.
10. Base of terra-cotta object, possibly a figurine; front ridge has horizontal incised lines painted red; lateral flanges have diagonal incised lines also painted red. The angles formed by the junction of the front ridge with the lateral flanges are bordered by two vertical incised lines, painted red, with a row of holes between them. A projection (now broken) at the back seems to have served as a handle or support. *k* 20, level 99.22.
11. One green and two yellow beads.
12. One mottled and one silvery glass bead.
13. Arrowhead, iron. From below floor of hall (*l* 21), level 99.95.
14. Nails, iron. From inside and outside the southwest corner of the Nabataeo-Roman building (*m* 8-9), level 101.20-100. Cf. *Nebo I*, Pl. 135.
15. Spatula, copper, *o* 9, level 100.22.
16. Chisel (?), iron. From apse of church (*j* 19), level 101.29-101.04.
17. Cylindrical, perforated stone embellished with criss-cross incisions; cf. *Tell Beit Mirsim, III*, Pl. 32:12 and p. 83. *l* 21, level 100.69.
18. Cylindrical mottled stone with shallow hole at each end for attachment. *k* 21, level 99.45.
19. Piece of jewelry, gold leaf over white stone core; length 16 mm., diam. 3-5 mm.; pentagonal in section; loop for suspension; three clusters of gold beadlets on under side. *m*-8, level 98.60.

Catalogue of Coins

The Nabataean, Roman and Byzantine coins were identified by Mr. Fred H. Armstrong of Toronto, the Islamic coins by Dr. George C. Miles of the American Numismatic Society. The writer desires to express his thanks to these gentlemen for their assistance.

Jewish

1. *John Hyrcanus II* (63-40 B. C.) See Pl. 20:1.
   Obv. Within a wreath:



   Rev. Double cornucopiae enclosing poppy head; border of dots.
   Cf. L. Kadman, "The Hebrew Coin Script," *Recent Studies and Discoveries on Ancient Jewish and Syrian Coins.* Publications of the Israel Numismatic Society, Number 1. Jerusalem, Israel (1954), pp. 150-69; F. W. Madden, *Coins of the Jews* (London, 1881), pp. 76-8; A. Kindler, "Rare and Unpublished Hasmonaean Coins," *Israel Exploration Journal*, II (1952), pp. 188-9, and B. Kanael, "The Greek Letters and Monograms on the Coins of Jehohanan the High Priest," *id.*, pp. 190-4. According to Kanael the monogram above the inscription is a crudely formed *alpha* and stands for *Antipater* who was placed in charge of Judaea's economic affairs by Julius Caesar in 47 B. C., and who exercised this office until his death in 43 B. C.
2. (a) Aretas IV (9 B. C.–A. D. 40) with Queen Shaqīlat. See Pl. 20:2a.
   Obv. Worn; jugate busts.
   Rev. Crossed and filleted cornucopiae; border of dots; of the legend, only the letters QLT are legible.
   Cf. G. F. Hill, *B. M. C. of the Greek Coins of Arabia, Mesopotamia, and Persia*, p. 8, Nos. 14-22.
   Prov. Unknown.
   (b) See Pl. 20:2b.
   Obv. Effaced.:
   Rev. Crossed cornucopiae; of the legend only T and QLT are legible.
   Prov. k 8, Level 99.58.

Roman

3. *Nero* (A. D. 54-68). Year 5. See Pl. 20:3.
   Obv. LE K[AICA]ROC around palm branch; border of dots.
   Rev. NER ωNC C within a wreath
   Cf. F. W. Madden, *History of Jewish Coinage* (London, 1864), p. 153, no. 1.
   Prov. Unknown.
4. *Aurelian* (A. D. 270-5). See Pl. 20:4.
   Obv. Bust largely effaced. ..BV CI.AVR...
   Rev. Female figure at l. presenting crown to Aurelian holding a spear; border of dots. RESTITUTO [O]RBIS. In ex.: XXI.
   Cf. H. Cohen, *Description historique des monnaies frappées sous l'empire romain communément appellées médailles impériales* (Paris, 1862), VI, p. 198, no. 209.
   Prov. Unknown.
5. *Maximianus Hercules* (A. D. 286-305). See Pl. 20:5.
   Obv. Laureate head facing r. (I)MP C MAXIMIANVS P F AVG
   Rev. Standing naked figure with mantle over one shoulder and holding objects in each hand. GENIO POPVLI ROMANI.
   Cf. Cohen, *op. cit.*, p. 510, no. 179.
   Prov. Unknown.
6. (a) *Constantine I* (A. D. 306-37). See Pl. 20:6a.
   Obv. Laureate head facing. ...TANTINVS P F AVG.
   Rev. Radiate male figure. ...C.VOM.
   Prov. f 20, outside east wall.
   (b) Constantine I (?) See Pl. 20:6b.
   Obv. Laureate head facing r.
   Rev. Effaced.
   Prof. Apse of church in *j* 19, level 99.75.
7. Unidentified. Probably from latter half of 4th cent. A. D. See Pl. 20:7
   Obv. Laureate head facing r. ...VS (PF) AV(G).
   Rev. At least one standing figure.
   Prov. h 17, level 98.46.
8. Unidentified. See Pl. 20:8.
   Obv. Standing figure with left arm akimbo and right holding staff (?).
   Rev. Effaced.
   Prov. fg 20.
9. Three *minimi*. Roman or Byzantine. See Pl. 20:9.
   Diam. 10 mm.
   Cf. H. Hamburger, "Minute Coins from Caesarea," *'Atiqot*, I (1955), pp. 115-38.
   Prov. Unknown.

Byzantine

10. (a) *Anastasius I* (A. D. 491-518). See Pl. 20:10a.
    Obv. Bust, facing r. [DN]ANAS[TASI]VS PPAV[G]

Rev. Large M with star on either side; mint mark Δ; in ex.: C(ON)
Cf. *BMC* I, p. 4, nos. 24-27 and *QDAP* VIII (1938), pp. 81-2 and pl. xlii.
Prov. *m* 8, level 100.10
(b) *id.* See Pl. 21:10b.
Obv. Laureate and bearded head? ...SPP...
Rev. Cross above large M: star on r.; mint mark ε.
Cf. *BMC* I, p. 4, nos. 28-9.
Prov. *m* 8, level 100.10
(c) *id.* See Pl. 21:10c.
Obv. Bust facing r. ...VSPPAV.
Rev. Cross above large M, star on either side; mint mark Γ; in ex.: CON
Cf. *BMC* I, p. 4, no. 23.
Prov. *j* 17, level 97.54 At junction of tower and wall on south side.
(d) A badly worn duplicate of (a); pierced. See Pl. 21:10d.

11. *Tiberius II Constantinus* (Cons. A.D. 574-8; Aug. 578-82)
See Pl. 21:11.
Obv. Bust facing, as consul.

...lbCONS TANTPPAN

Rev.

Cf. *BMC* I, p. 109, nos. 28-33 and Pl. XIV, 6.
Prov. Unknown.

12. *Maurice Tiberius* (A.D. 582-602). See Pl. 21:12.
Obv. Bust facing.

[D]NMAVRICI T[ıb]ERIPPA.

Rev.

Cf. *BMC* I, p. 132, no. 48 and *QDAP* VIII (1938), p. 84 and Pl. XLII.
Prov. *m* 8-9, level 99.79 Above pavement in Arab room 1.

13. Unidentified. Probably 6th century A.D. See Pl. 21:13.
Obv.

Rev.

Prov. *l* 21 Under first pier of north wall.

Islamic

14. Umayyad. Damascus. No date. See Pl. 21:14.
Cf. Walker, *A Catalogue of the Muhammadan Coins in the British Museum*, II (London, 1956), no. 816.
Prov. Unknown.

15. Umayyad. No mint. No date. Anonymous. See Pl. 21:15.
Prov. *lm* 8-9, level 99.79 West of wall.

16. Umayyad. Mint effaced, probably al-Ramlah. No date. See Pl. 21:16.
Prov. Above tower in *h* 18, level 99.66

17. 'Abbāsid. Al-Baṣrah. 165 A.H. = A.D. 781-2 Dirhem. With names of Caliph al-Mahdī and heir-apparent Mūsa. See Pl. 21:17.
Prov. Outside east wall.

18. Zengid. Maḥmūd b. Zengi. (541-69 A.H. = A.D. 1146-73). See Pl. 21:18.
Cf. *BMC III*, no. 601
Prov. Outside east wall.

19. Ayyūbid. Ṣalāḥ al-Dīn Yūsuf (564-89 A.H. = A.D. 1169-93). See Pl. 21:19.
Prov. Outside east wall.

Catalogue Numbers of Objects Shown on Plates

Pl. 13: 1 — 629
2 — no cat. number
3 — 698
4 — no cat. number.
5 — 275
6 — 863
7 — 1556
8 — 891
9 — 1133
10 — 1565
11 — 1458
12 — 992
13 — 1566
14 — 1364
15 — 1081
16 — 1682
17 — 1371
18 — 1232

Pl. 14: 1 — 1236
2 — 403
3 — 1705
4 — 1706
5 — 970
6 — 433
7 — 362
8 — 1540
9 — 1543
10 — 1563
11 — 1181
12 — 1477
13 — 1605

Pl. 15: 1 — 1131
2 — 1197
3 — 902
4 — 1160-1258
5 — 1624
6 — 1279
7 — 1586
8 — 54
9 — 960
10 — 772-772b
11 — 1198
12 — 1199
13 — 32
14 — 1539
15 — 1250
16 — 1325
17 — 1357
18 — 1245

Pl. 16: 1 — 189
2 — 1530
3 — 434
4 — 1590
5 — 1591
6 — 1536
7 — 1479
8 — 1531
9 — 1344
10 — 1273
11 — 1282
12 — 1700
13 — 1628
14 — 1551

Pl. 17: 1 — 875
2 — 1228
3 — 514
4 — 937
5 — 1581
6 — 1343
7 — 791
8 — 1394

Pl. 18: 1 — 1577
2 — 31
3 — 1606
4 — 1138
5 — 1687
6 — 1657
7 — 1632
8 — 1619
9 — 1630
10 — 1631
11 — 1240
12 — 1618
13 — 874
14 — 834
15 — 1681
16 — 390
17 — 1587

Pl. 19: 1 — DO 1
2 — DO 2
3 — DO 29
4 — DO 8, 9, 19, 24, 44, 54
5 — DO 7
6 — DO 14, 15, 16, 17
7 — DO 18, 55
8 — DO 62, 47
9 — DO 25
10 — DO 11
11 — DO 20, 21, 22
12 — DO 23
13 — DO 6
14 — DO 32, 38
15 — no cat. number
16 — DO 34
17 — DO 13
18 — DO 30

PLATE 1:1 East side of Dhiban mound, and expedition camp.
2 The expedition staff: (from left to right) Williams, Tushingham, Winnett, Baramki, Morton; (seated) Mrs. Tushingham, Dr. Mowry, Mrs. Morton; (below) Scott, Pritchard, Murphy. Absent: Ogden and Thompson.

PLATE 2:1 The tower, with Wall 5 running over it, Wall 2 in front of Wall 5, and Wall 3 encircling the tower. Looking south.

2 Inner face of tower; Wall 4 to the right. Looking south.

3 Inner face of tower, showing junction of Wall 4 with tower. Looking north.

PLATE 3 The great battered wall (Wall 3) on the east side of the mound.

PLATE 4:1 Wall 3 projecting outwards to encircle the tower (at left, not yet cleared); Wall 5 above.
2 Wall 1 below, Wall 4 above, and Wall 5 to the left.
3 Wall 2 to the left, Wall 1 to the right, and Wall 5 resting on "fill" between them.
4 Wall 1 below, Wall 4 above it, and Wall 5 to the left.

PLATE 5:1 Northwest corner of *calidarium*, showing flue and blocked-up furnace.
2 Interior of *calidarium*. Line of plaster on west wall marks the original floor level.
3 Baptistry font of church.
4 Corner of church at right, Wall 4 in center, and Wall 5 at left. Looking south.

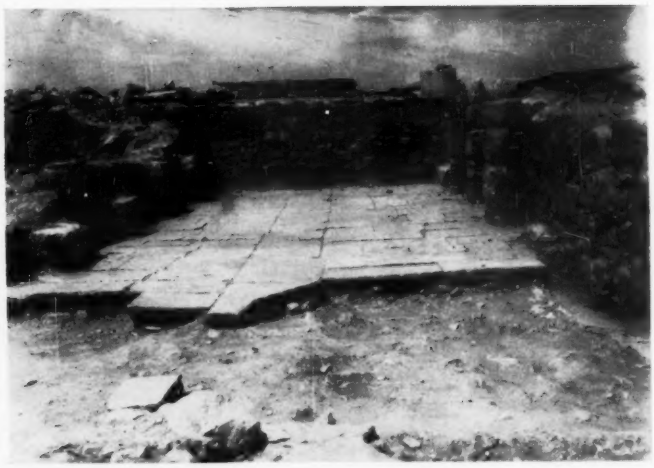


PLATE 6:1 Paved hall in *jkl* 21. Looking west.
2 Hall with secondary wall and blocked-up door.
3 West wall of hall, showing notches for keying second coat of plaster.
4 Doorway at northwest corner of hall.
5 South wall of hall.

PLATE 7:1 South wall of *calidarium*, with south wall of hall in foreground.
2 South wall of hall with pilaster bonding stones.
3 The excavation to bedrock beneath the hall. Composite photograph.

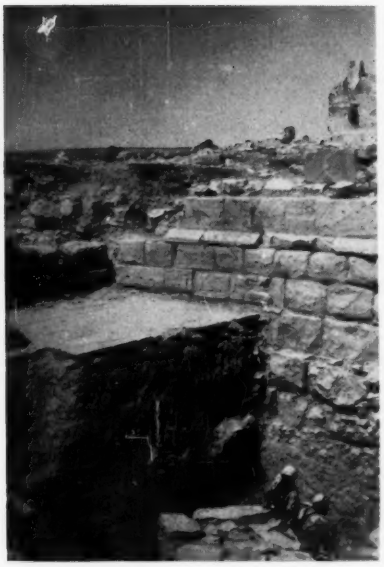


PLATE 8:1 West wall of Nabataeo-Roman temple, with sheikh's tomb in background, Byzantine flagstone pavement in foreground, and apsidal wall at lower level.

2 View showing abutment of west wall of Nabataeo-Roman temple on south city wall.

3 Arab room 1 to west of Nabataeo-Roman temple. Looking north.

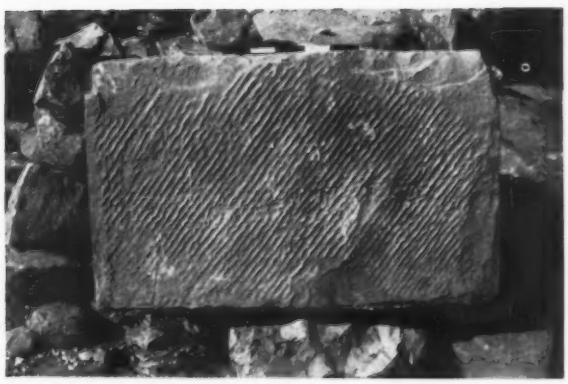


PLATE 9:1 Seat between two pilasters in Arab room 2. Looking northeast.
2 Arab structures against south wall of Nabataeo-Roman temple.
3 Apsidal wall in *n* 8-9.
4 Block with Nabataean dressing.






PLATE 10:1-6 Architectural fragments.





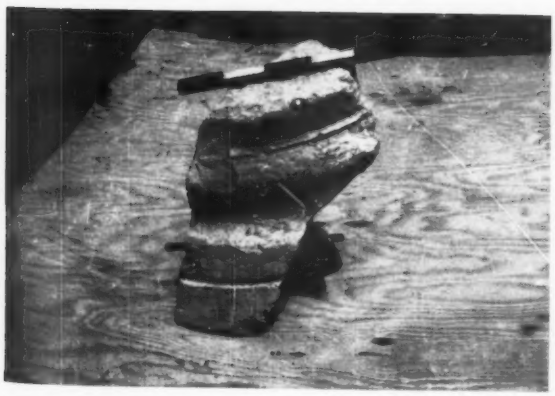
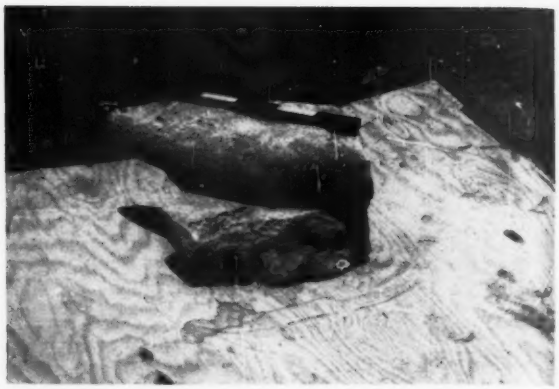
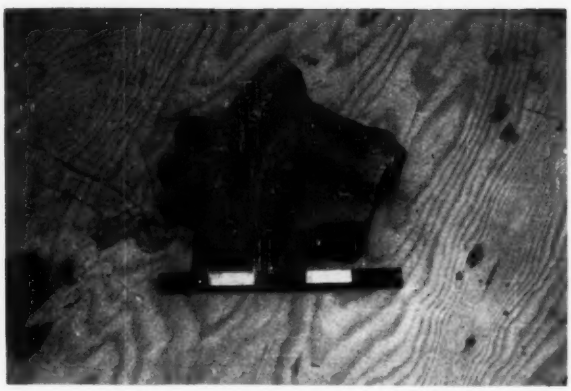



PLATE 11:1-6 Architectural fragments.





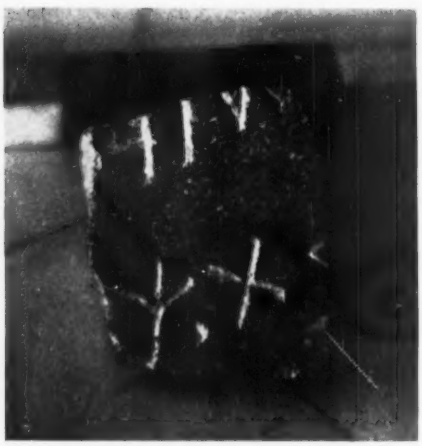


PLATE 12:1 Lintel stone with cross.
2 Fragment of a column base.
3 Fragment of basalt press or offering table.
4 Flagstones with Greek letters from hall.
5 Entrance of tomb.
6 Fragment of Moabite inscription.

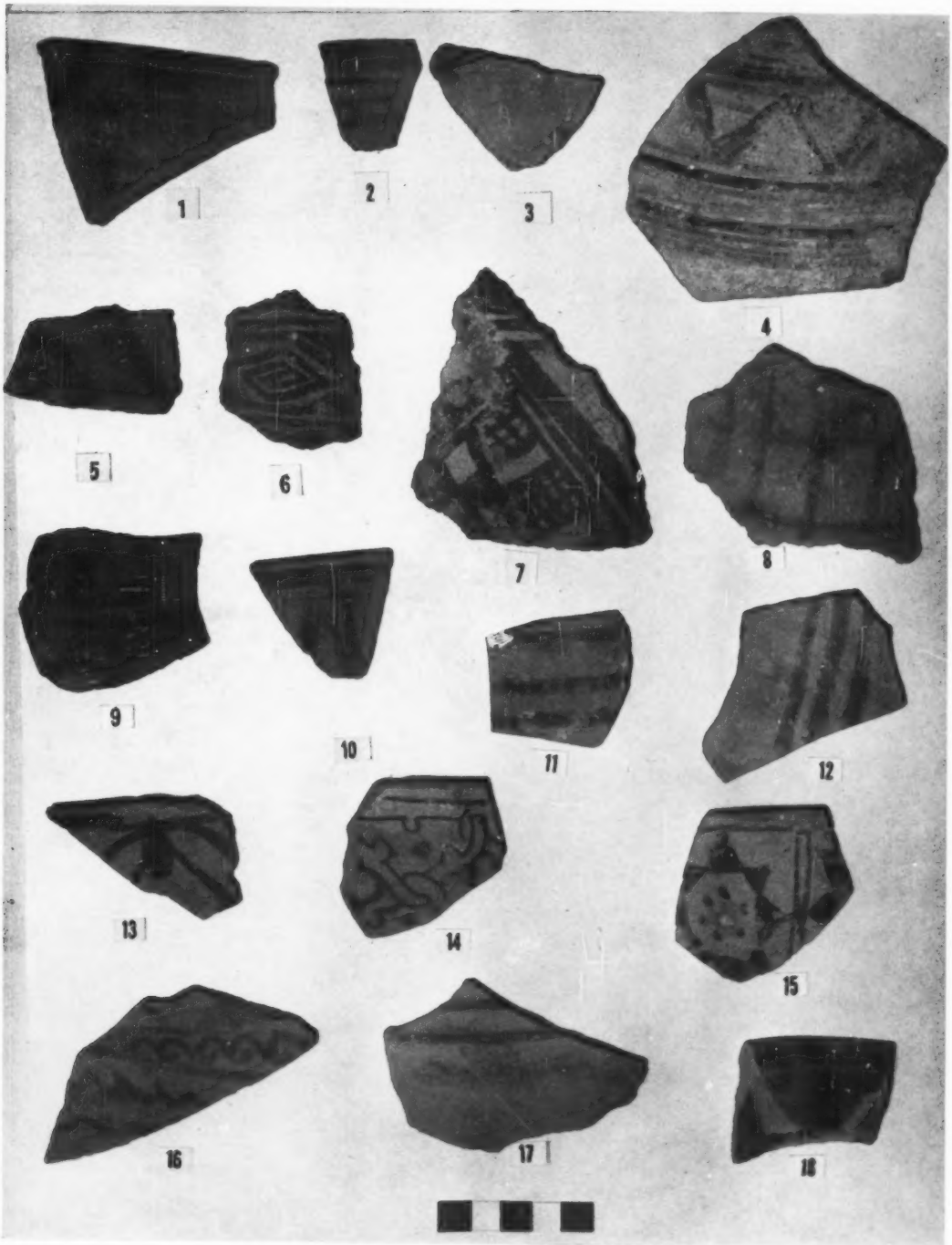


PLATE 13:1-18 Painted pottery.

PLATE 14:1-13 Handles.

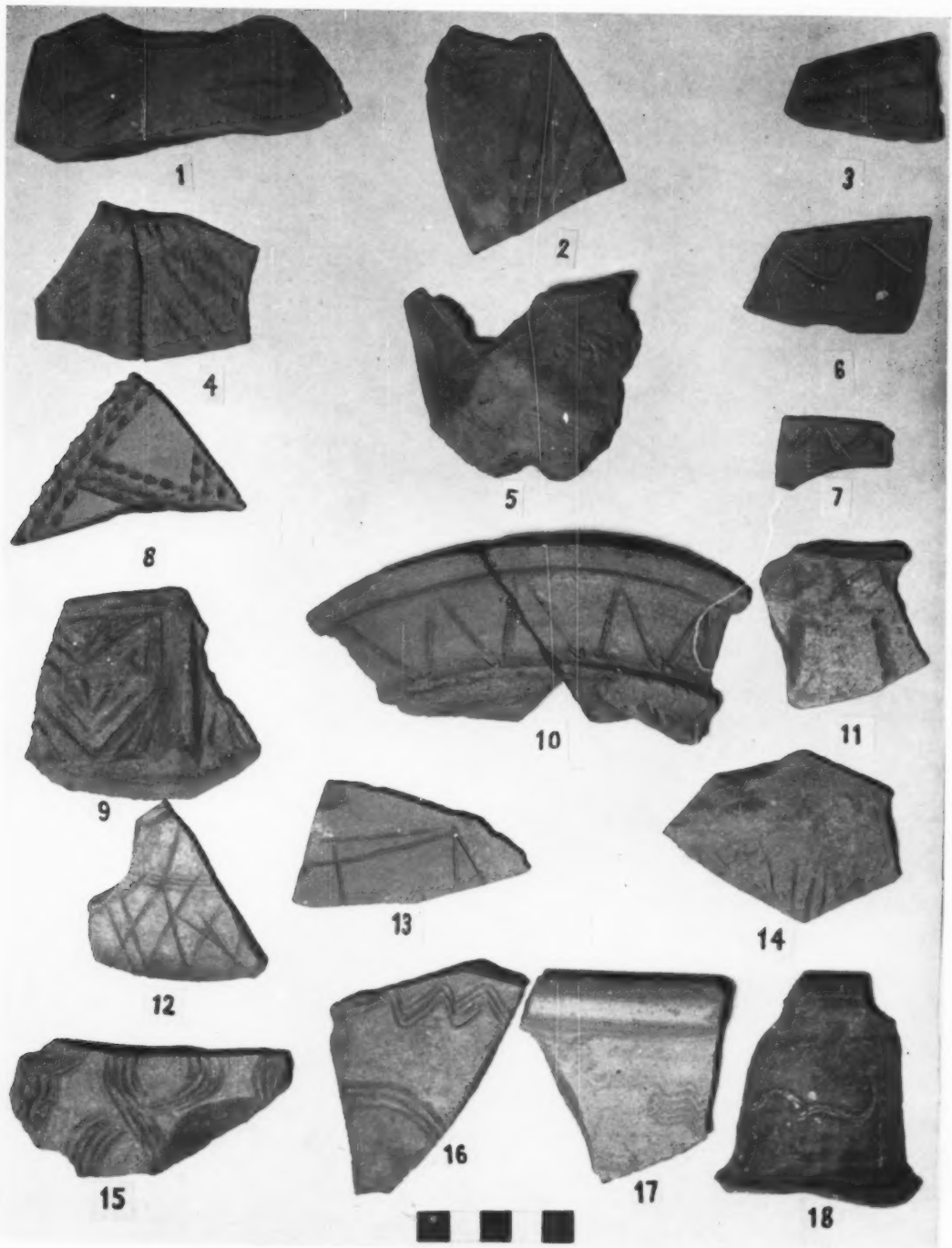


PLATE 15:1-18 Sherds with incised decoration.

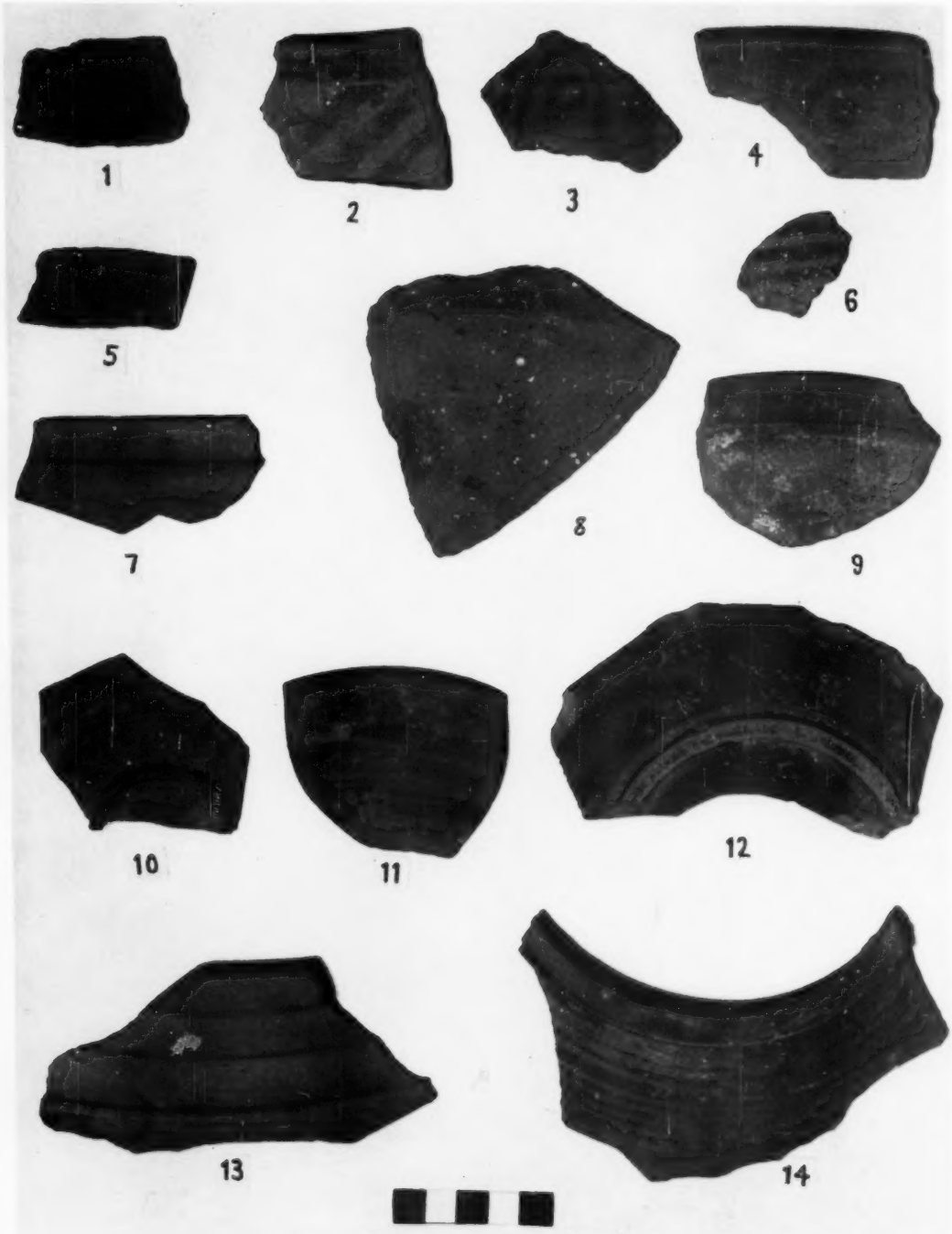


PLATE 16:1-14 Pottery from various periods.

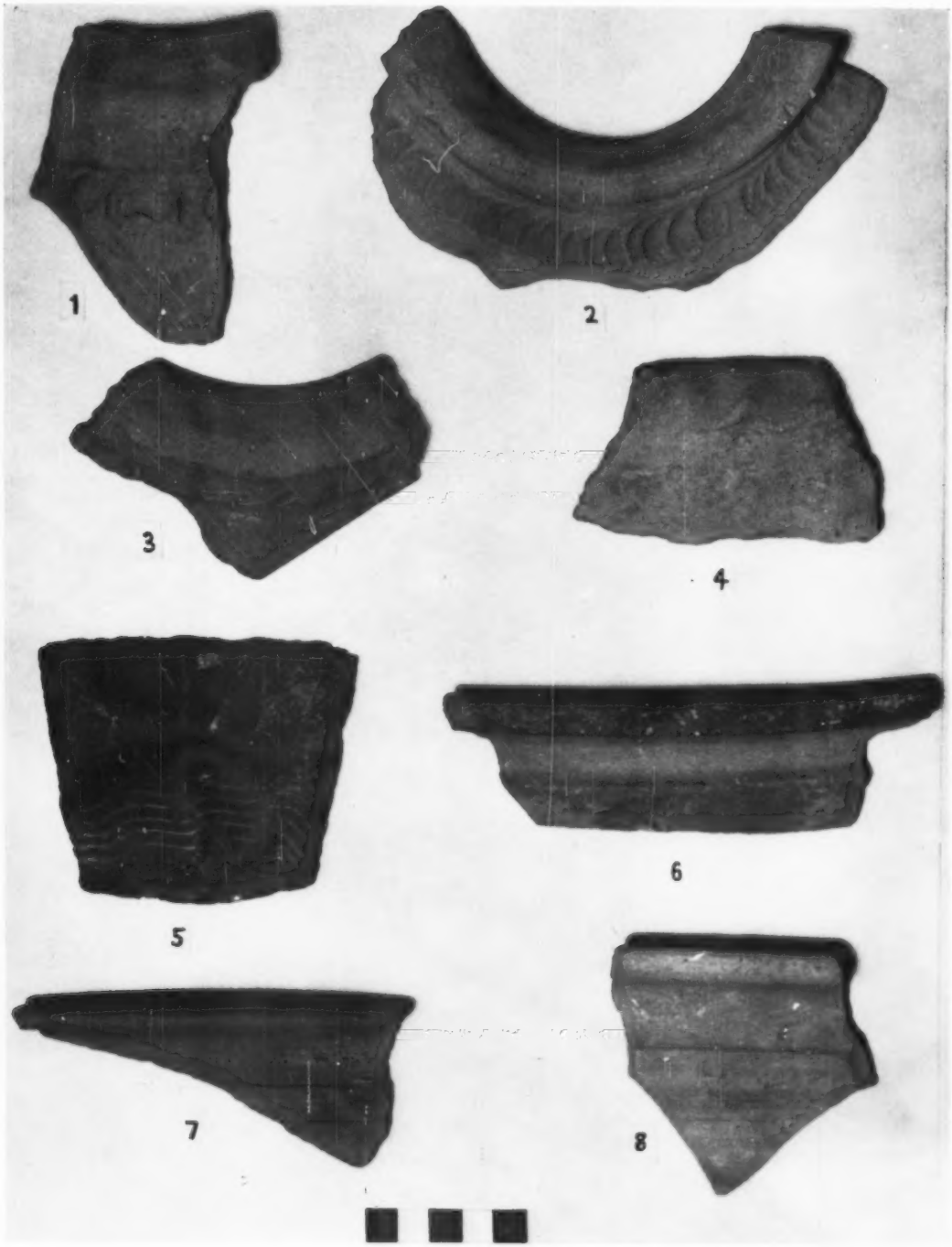


PLATE 17:1-8 Rims

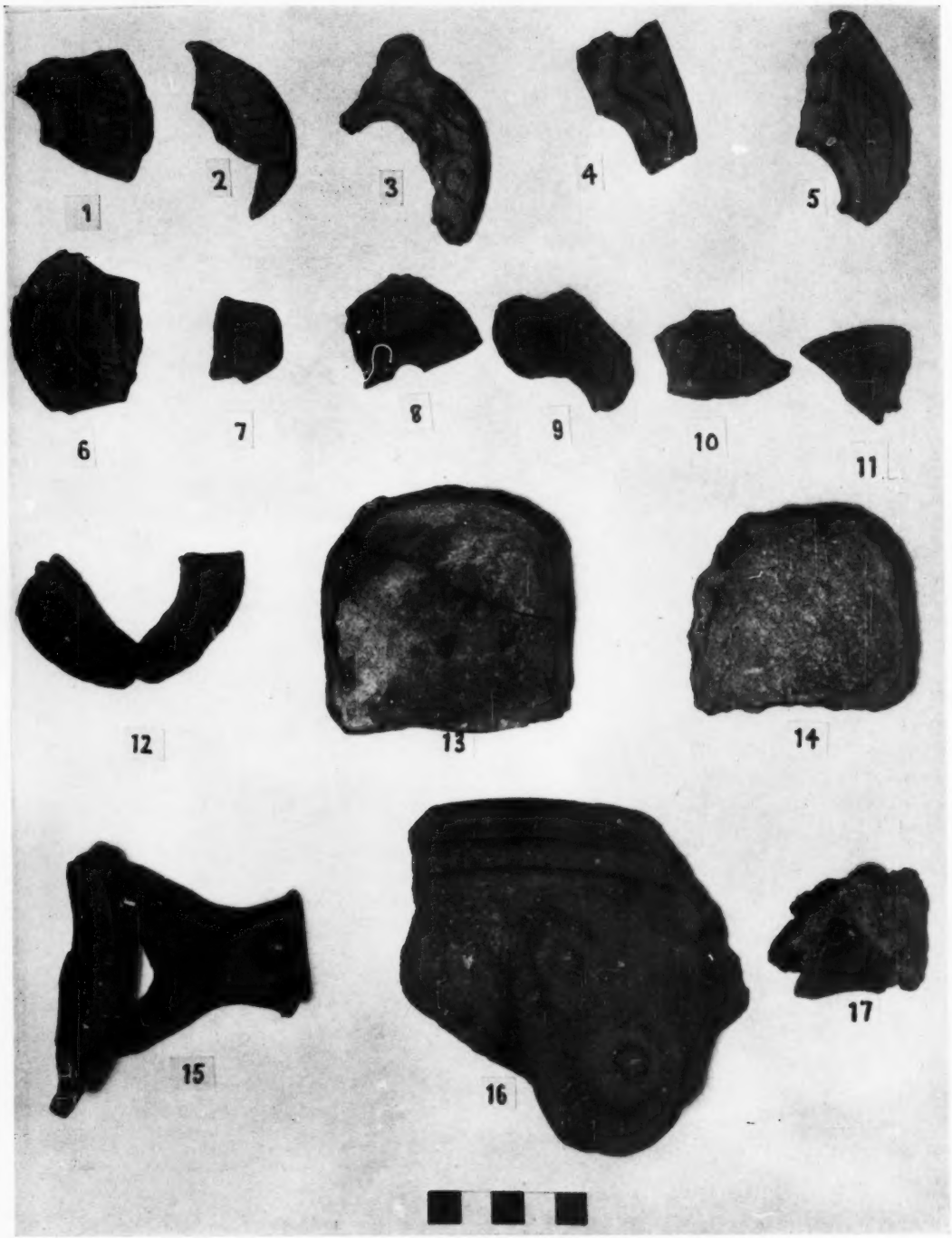


PLATE 18:1-17 Lamps and other objects.

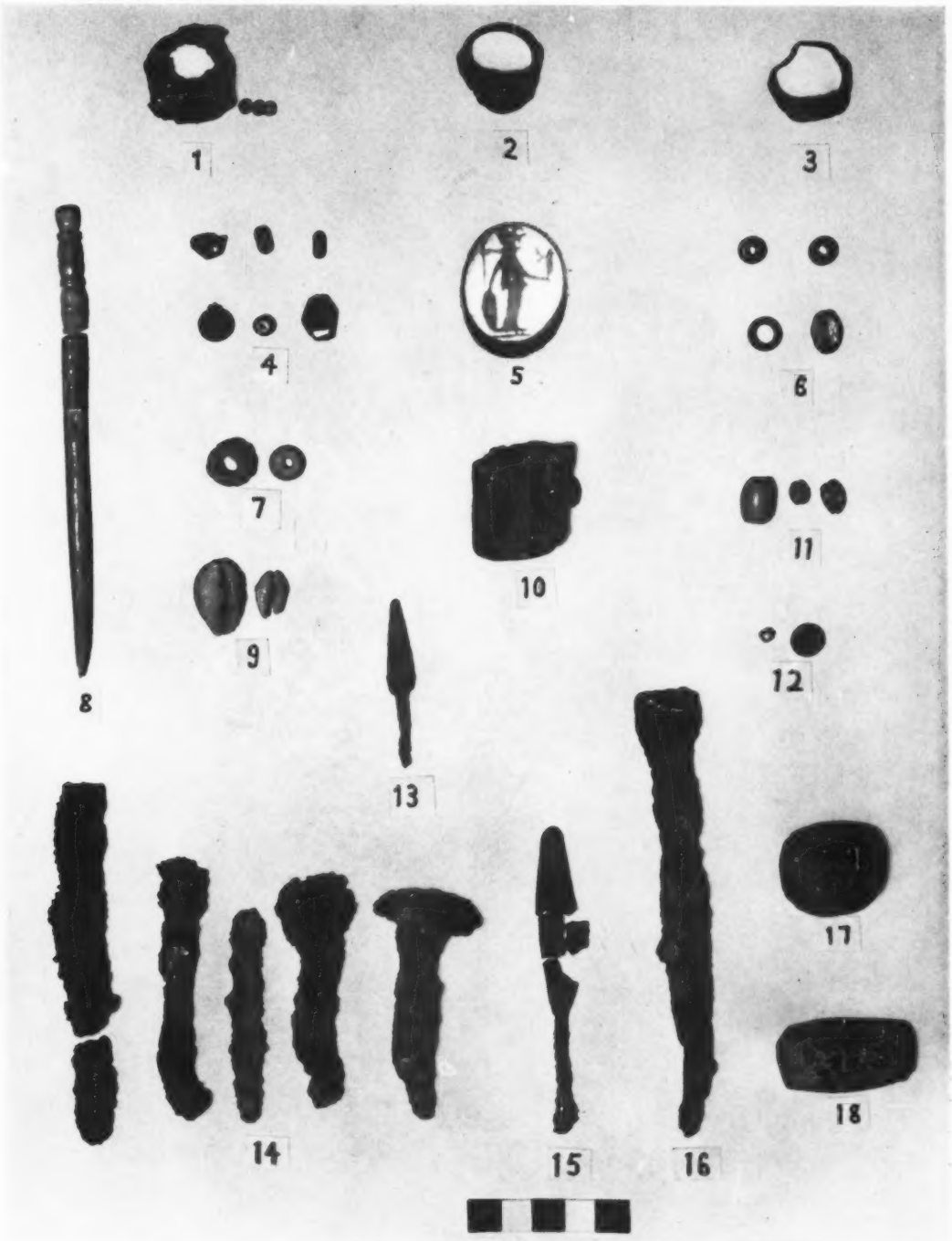


PLATE 19:1-18 Small objects.

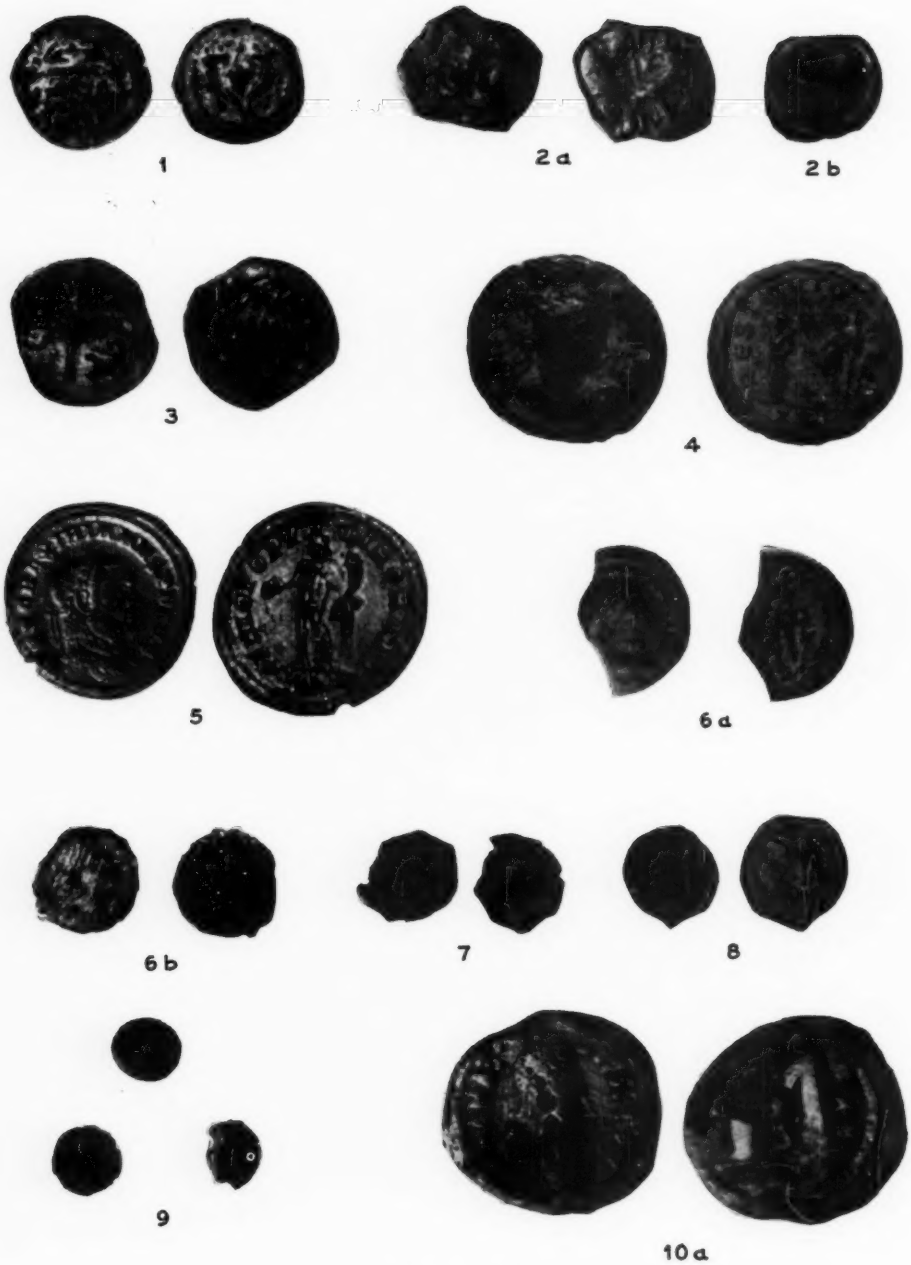


PLATE 20 Coins.

10b

10c

10d

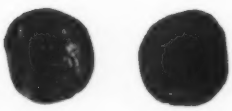
11

12

13

18

19



15

16

17

14

PLATE 21 Coins.

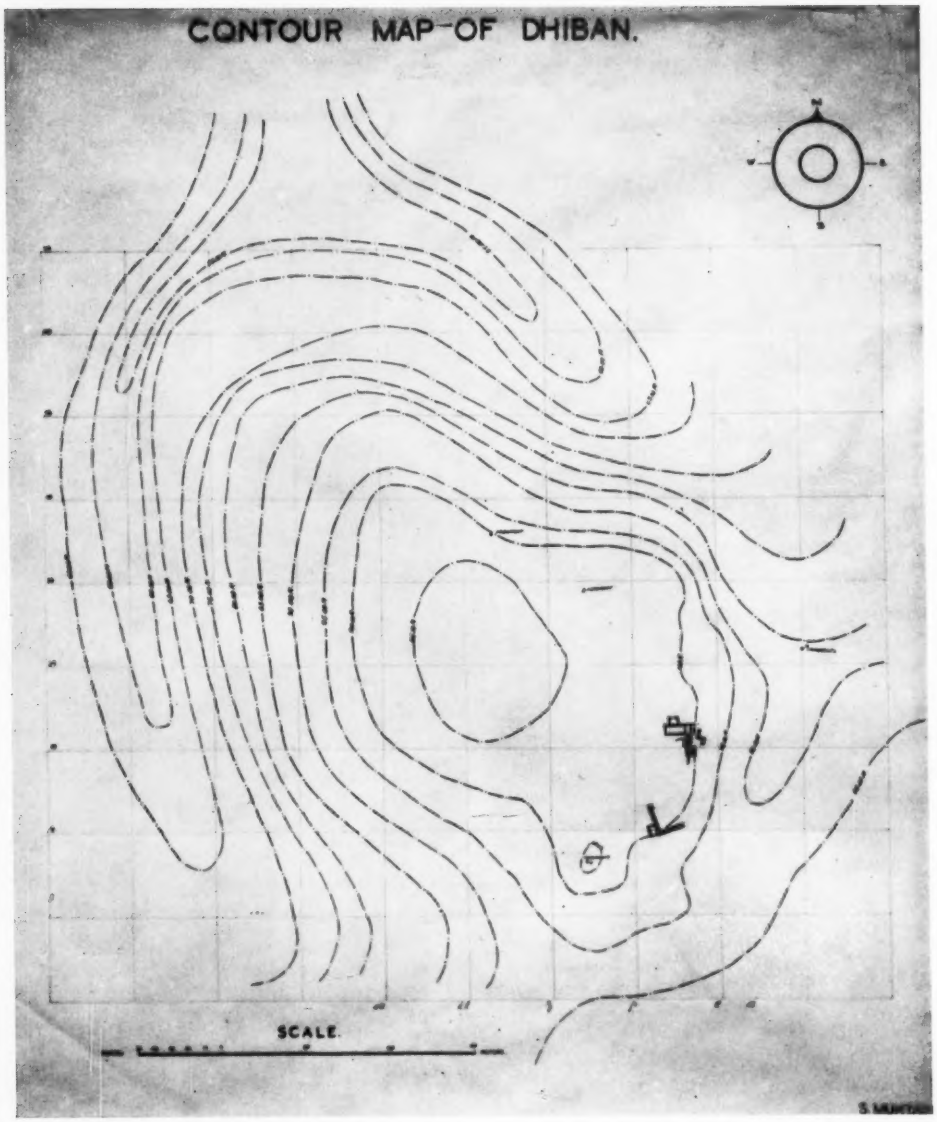


PLATE 22 Contour map of Dhiban.

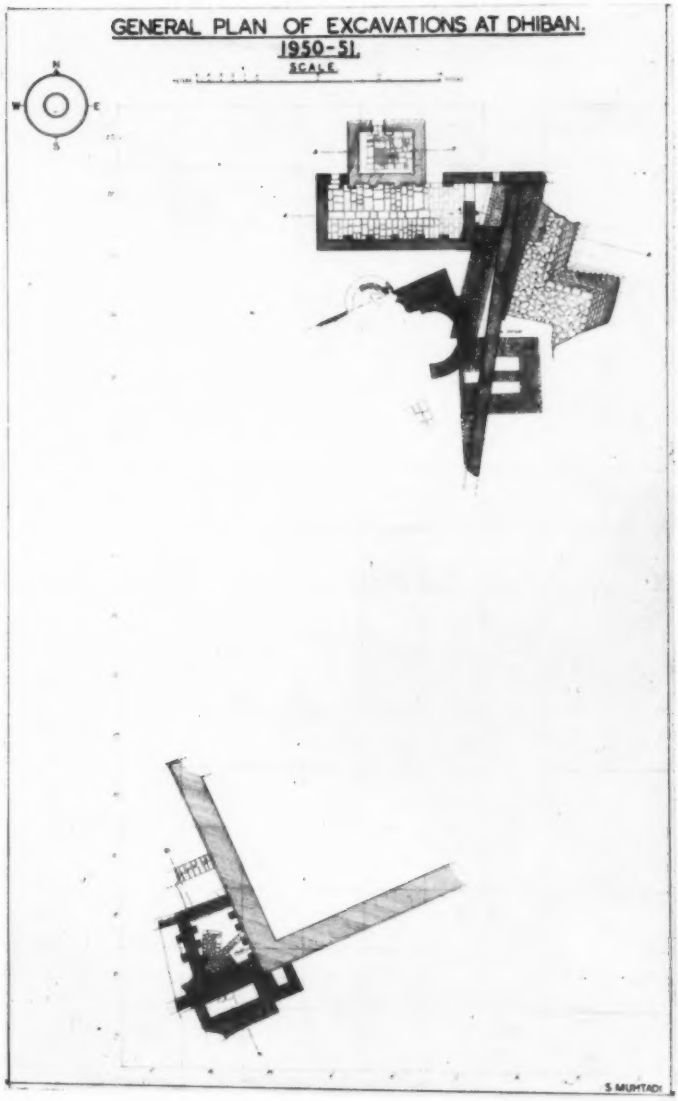
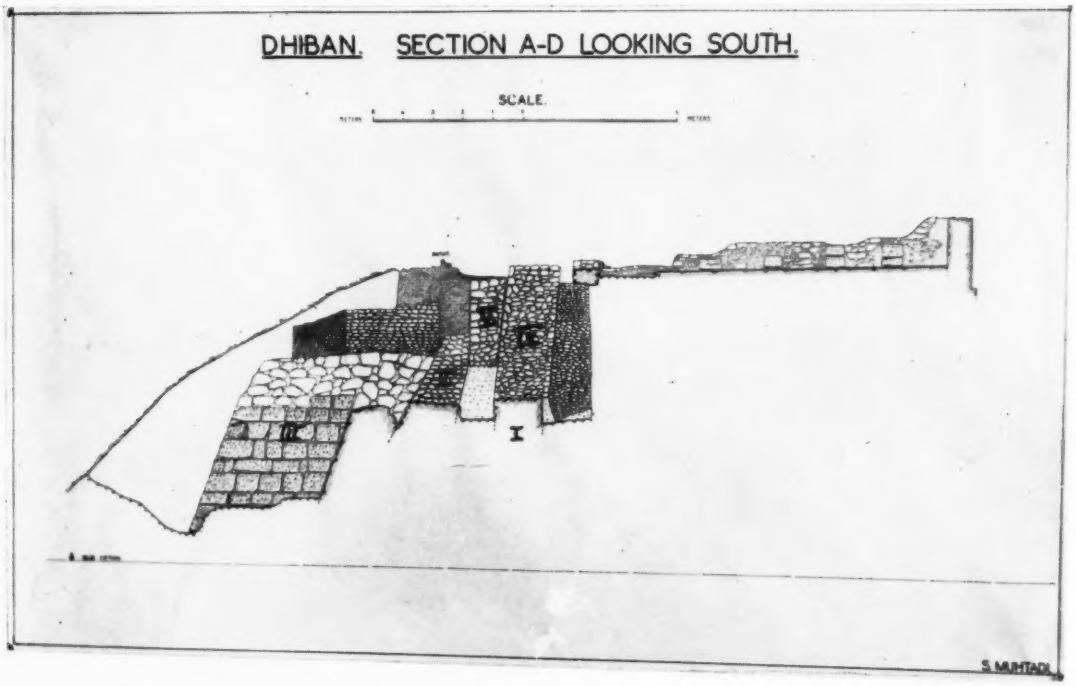


PLATE 23 General plan of the excavation, 1950-51.



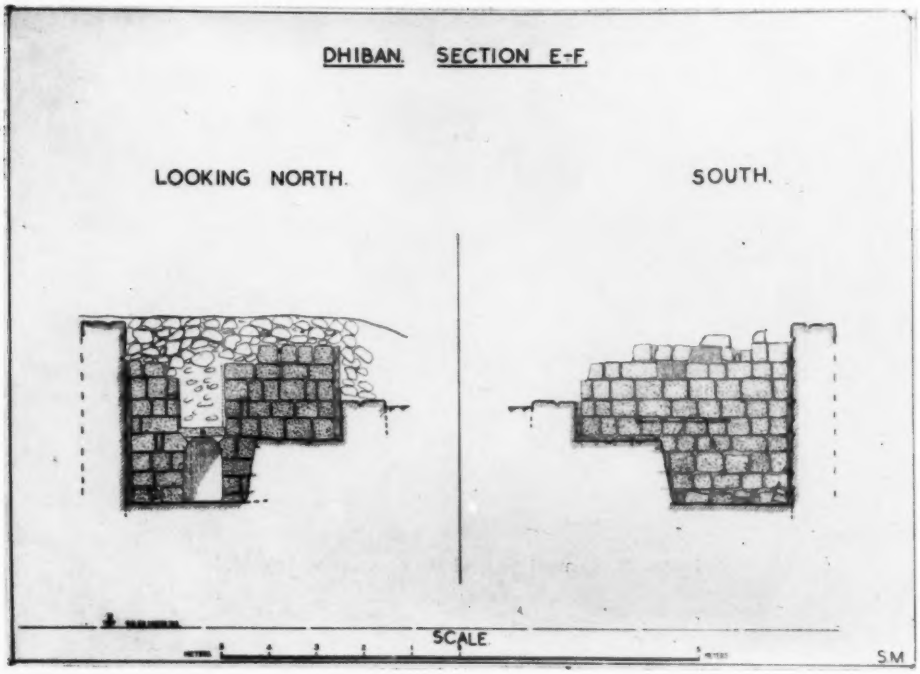
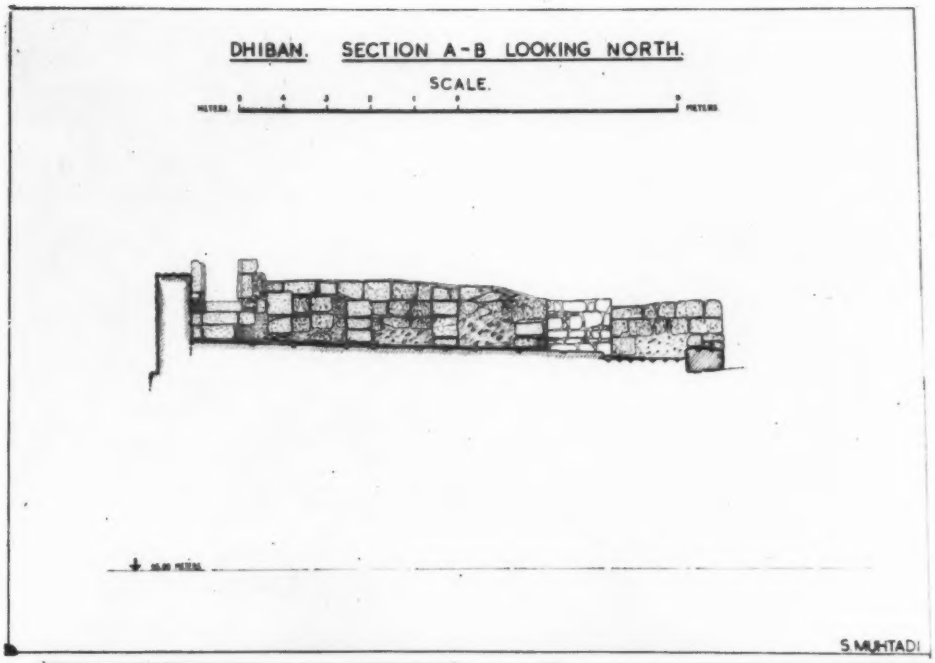


PLATE 24:1 Dhiban. Section A-D.
2 Section E-F.



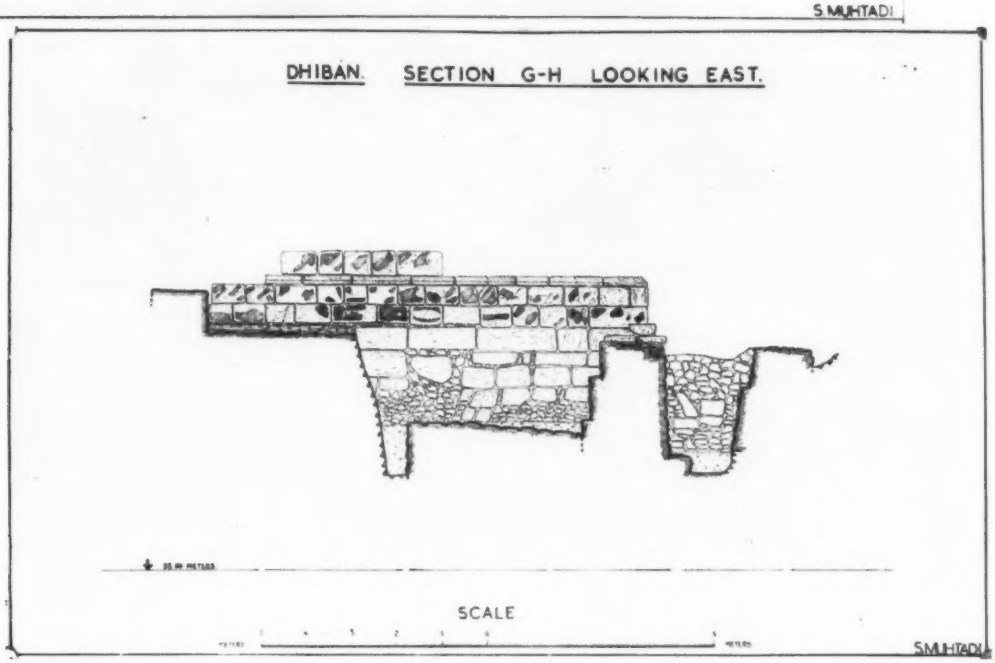


PLATE 25:1 Dhiban. Section A-B.
2 Section G-H.

PART II

THE EXCAVATIONS AT DIBON (DHÎBÂN) IN MOAB

THE SECOND CAMPAIGN, 1952

BY

WILLIAM L. REED

TO
ANNETTA

Introduction

The location of the area to be excavated at Dhībân during the second campaign was determined, in part, by the discoveries made during the preceding season in soundings southwest of the large Roman-Nabataean building in the ruins of which was located the Sheikh's tomb often mentioned by travelers who could see it from the highway. Dr. Winnett's reports suggested that the stratification in this area was such that it might be possible to determine the occupational history of Dhībân without becoming involved in the labor of removing massive city walls such as were located at the east side of the *tell*. Two other factors were also considered. It seemed desirable to attempt to investigate the suggestion which had been made by early visitors to Dhībân such as Brünnow and Domaszewski, Duncan Mackenzie, George Adam Smith and others,[1] who had proposed that a "Gateway" must have existed at the southeast corner of the *tell* which is joined by a "saddle" of earth leading south to the modern village of Dhībân. Furthermore, it was reported by local inhabitants that the "Moabite Stone," the inscribed stele set up by Mesha, king of Moab, had been found in 1868 on the surface of the *tell* where it was proposed to excavate. The general terrain was such as to suggest that the area might contain a dwelling area as well as a "gateway." The choice of the location of the dump pile at the edge of the *tell* nearby assured a most economical use of a limited budget.

Work started on April 15, 1952 and concluded on June 10, 1952. The staff included: Supervisors, Dr. A. Douglas Tushingham, Annual Professor of the American School; Dr. Gus W. Van Beek, Fellow; Dr. Edwin Broome; and Dr. Joseph Free; Surveyor, Mr. Peter Pedrette; Photographer, Mr. Jamil Albina; Foreman, Mr. Hasan Abu Awad Qutshan; Chauffeur, Mr. Imran Abdo; Cook, Mr. Benny Christaki; and the writer as Director.

Although the American Schools have traditionally engaged in field work under a joint sponsorship with its Corporation members or sister institutions, the 1952 campaign was sponsored by the Schools alone. It will be recalled that this period, following the assassination of King Abdullah and the border troubles between Jordan and Israel, made the planning of an excavation, the securing of a qualified staff, and the financing of an expedition most difficult. However, cooperation was offered from many sources and appreciation of it is herewith recorded. The members of the staff (see Pl. 27:1, with the exception of Dr. Free who was absent at the time the photograph was made) deserve sincere thanks for their faithful and skillful labor, and for putting up with the strenuous conditions imposed by camp life rather far removed from the source of supplies. Special thanks are due Mr. Gerald Lankester Harding, then Director of the Department of Antiquities, and to Dr. Awni Dajani, Chief Inspector, who has since become Director of the Department. Through their efforts it was possible to secure the land for excavation without rental and to maintain cordial relations with the Mukhtar and the people of Dhībân who assisted in every possible way. Inspections of the work by Mr. Harding and Dr. Dajani, as well as visits by Père R. deVaux and Père J. T. Milik of the École Biblique, Dr. Carl H. Kraeling, President of the American Schools, and Father Sylvester J. Saller, of the Franciscan School in Jerusalem, resulted in many helpful suggestions.

The writer wishes to record also his appreciation to the officers of the American Schools for their confidence expressed in connection with the campaign and their encouragement during the labor of preparing the report of the results. Although funds for excavating were limited, the Trustees authorized the campaign, not only for the purpose of expanding the knowledge of Moabite culture but also as a training project for students of the Jerusalem School. As one who had been a Fellow at the School in 1937-38 and had been a staff member at the excavations conducted by Dr. Nelson Glueck at Khirbet et-Tannûr and Tell el-Kheleifeh (biblical Ezion-geber), the writer knows how important such field work can be. President Kraeling and Professor A. Henry Detweiler, Chairman of the Jerusalem School Committee and since, President of the Schools, were most helpful in their support of the work. Dr. William F. Albright, Vice-President of the Schools and Chairman of the Publications Committee, was most

[1] *Dibon I*, p. 7, Footnote 1.

generous in sharing his knowledge of Palestinian pottery by examining a number of sherds which the writer took to Baltimore for study. Dr. Gus Van Beek, Associate Curator of Archaeology at the Smithsonian Institution and Editor of the ANNUAL, has been a source of encouragement, not the least of which was the setting of a dead-line for the completion of the manuscript.

The writer wishes also to express appreciation to Dr. M. E. Sadler, Chancellor of Texas Christian University, and to the University Committee which made available a Faculty Research Grant that provided funds for some of the photographs and all the pottery drawings. The latter were made by Mr. Marvin Layman, a graduate student. Miss Pat Ward, also a graduate student, computed the capacity of the cistern excavated in Area C. Mrs. Betty Ratcliff Davidson, then of Fort Worth, Texas, typed a preliminary draft of the Catalogue, and Mrs. Foresta Logston of Lexington, Kentucky typed the final draft of the manuscript.

The preparation of the report was made possible with the advice of several scholars, who through correspondence and interviews greatly helped in the interpretation of the finds. Mr. George C. Miles, Chief Curator of The American Numismatic Society, was responsible for a thorough chemical and electrolytical cleaning of the coins and for providing a list of attributions. Dr. Harold N. Moldenke and Dr. Jason R. Swallen, Head Curator of the Department of Botany of the Smithsonian Institution, were kind enough to classify the grain. Dr. C. I. Alexander, Manager of the Field Research Laboratory of the Magnolia Petroleum Company in Dallas, Texas, arranged for the Carbon-14 test of the grain. Messrs. David Havens and Bob Doyle of Lexington conducted defraction tests of typical sherds in an attempt to date them by means of spectroscopic analysis. Mr. Gerald Lankester Harding arranged for the photographs and drawings of some of the pottery which was kept for the Amman Museum. Following the completion of the excavations at Dhībân in 1955, the Director, Dr. Wm. H. Morton, conducted the writer on a tour of the regions at the north and central areas of the *tell* where extensive work had been done and discussed the findings in terms of discoveries made in 1951 and 1952.

Finally, the writer would record appreciation to his wife, Annetta Pendergast Reed, who managed the business affairs of the Jerusalem School during the course of the excavation, later assisting with the comparative study of the pottery, the preparation of the Catalogue, and the restoration of the pottery making use of techniques she learned from Mr. Mubarak Saad, and the latter's son, Mr. Yusef Saad, Secretary of the Palestine Archaeological Museum.

WILLIAM L. REED

The College of the Bible
Lexington, Kentucky
March 8, 1961

CHAPTER I

The Buildings

1. The Site

During each campaign at Dhībân, the excavators have been concerned with the question of the identification of the city as the Dibon of the Old Testament and the Mesha stele.[1] Although no inscriptions have been found in the course of the excavations which would settle the matter to the satisfaction of all scholars, the stratigraphic evidence and the occupational history make it reasonably certain that the ancient name "Dibon" and the place are preserved in the modern name and site of "Dhībân." Although the buildings were not extensive in the area excavated in 1952 that could be dated to Iron II, the period of Omri-Ahab-Mesha, *ca.* 850 B. C., and although the main settlement of this period apparently lay north of the area excavated, there is no doubt that Dhībân was an important city in pre-exilic Old Testament times. Its strategic location on the King's Highway (Num. 20:17, 19, 21:22) gave it a special military and commercial importance. Its size marks it as one of the largest of the cities east of the Jordan, a fact which would give it special significance in the eyes of the Moabites, such as Mesha who was interested in expanding the limits of his Kingdom which lay largely south of the River Arnon, or the Nabataeans, such as Aretas IV and Rabbel II in the 1st century A. D., who maintained control over the great caravan cities, or the Romans, such as Septimius Severus who built impressive public buildings in the great commercial centers of the Near East.[2]

While the excavations were in progress, it was possible to undertake some exploration in the country surrounding the *tell*. One is impressed at the fertility of the land which can sustain a large population even in modern times when the water conservation methods of the ancient Moabites and Nabataeans have been largely neglected. The present village of Dhībân has a population of less than two hundred, but about four thousand Bedouin are said to live in the district; Medeba, about eighteen miles north, has a population of about ten thousand. Quantities of grain are still harvested each year on the Moabite plateau and the terraced hillsides (Pl. 29:1). Proximity of the region to north Arabia does not result in severe heat, even in June and July when the breezes from the Mediterranean, and the elevation of the site, 2130 ft. above sea level, combine to provide a moderate climate.

About fifty men and boys from Dhībân were employed; many of them had worked the previous season and the training they had received, especially for the pick-men, was a welcome asset. Members of the staff supervised the work and, in addition, assisted with the washing of pottery and the recording of more than three thousand sherds and objects. Water supply for the camp, which could be a problem in the area, was purchased from privately owned cisterns near the *tell* and transported to the camp on the backs of donkeys. The cost of excavating, which Duncan Mackenzie had predicted "would involve an enormous outlay of funds,"[3] was considerably diminished by the decision of several residents of Dhībân to make use of stones from the medieval Arabic level to construct new houses, moving the stones by truck and camel at their own expense after the surveyor and photographer had completed their work on Stratum I.

2. Stratification

Surface exploration at Dhībân by early travelers as well as by the writer, and the first season of

[1] Cf. Fred V. Winnett, *Dibon I*, pp. 7-10 for an excellent discussion of the identification of the site; preliminary reports of the 1952 campaign have been published by the writer in the *ASOR Newsletter*, June, 1952. pp. 1-3; *ADAJ*, II (1953), pp. 86-87; *BA*, XVI (1953), p. 6; *BASOR*, No. 146 (1957), pp. 6-10.

[2] Although it is difficult to estimate the occupied portion of a *tell* that has not been excavated in all areas, a comparison with Jericho (Tell es-Sulṭân) is of interest. Mr. Peter Pedrette, who served as surveyor at Dhībân and also in 1952 at Jericho, noted: "The area of the *tell* at Dhībân is approximately 75,000 sq. meters or 18½ acres; Jericho is smaller having an area of 53,000 sq. meters or 13 acres." It seems probable that the entire *tell* was not occupied in any one period; this is suggested by measurements reported for the previous campaign which varied from 6.50 to 7.15 acres.

[3] *PEFQS* (1913), p. 71.

excavations conducted by the American Schools of Oriental Research in 1951, under the direction of Dr. Fred V. Winnett, made it clear that the stratification of the site had been greatly disturbed by reason of frequent rebuilding through the centuries.[4] Hence, it was decided that the use of the trench system to excavate as complex an area as the "Southeast Gateway" would be undesirable. Therefore, three Areas, A, B, and C (Pl. 86) were staked out for excavation. During the course of the work, Area B was extended to the south as Area E, and Area C was extended in the same direction as Area D. These Areas together, including balks that were left as guides to stratification and as catwalks for use in the removal of debris, represented a surface of 420 sq. meters. In each Area, excavations reached bedrock.

Under the careful supervision of staff members, several of whom had worked with Miss Kathleen Kenyon at Jericho where the first season of work under the joint sponsorship of the American Schools of Oriental Research and the British School of Archaeology had concluded a few weeks earlier, the debris was removed level by level according to its color and texture. Because of the type of building and rebuilding using stone material in ancient Dhîbân, foundation trenches could not be detected with certainty. Occupation levels could be readily determined for each of the periods, Arabic, Byzantine, Roman-Nabataean and Iron II. However, these could be designated as Strata only after an analysis of the pottery and a study of the building plans for each Area and Stratum. Such analysis led to the conclusion that the "levels" of debris, as noted in the day-by-day excavation and reported in the Registers, varied greatly between Areas and even with individual Areas, often indicating only that debris from different parts of the *tell* and different periods of occupation had been mixed as it was moved by the ancient builders for the purpose of leveling for subsequent buildings.

The following summary of Strata and levels of debris within each Area gives the results of the area method used in the excavation with reference to each period of occupation:

Stratum I — Arab
Stratum II — Byzantine
Stratum III — Roman-Nabataean
Stratum IV — Iron II

[4] See F. V. Winnett, *Dibon I*, p. 7; George Adam Smith, *PEFQS*, Jan., 1905, p. 41.

It will be noted below that Stratum IV was found only in Areas B and C.

Area A

Stratum I — Surface and levels 1 and 2
Stratum II — Levels 3, 4, 5
Stratum III — Levels 6 through 11

Area B

Stratum I — Surface and levels 1, 2 and 3
Stratum II — Level 4 (N. side)
Stratum III — Level 4 (S. side), 5, 5a
Stratum IV — Levels 4a (Bin), 6, 7

Area C

Stratum I — Surface
Stratum II — Level 1
Stratum III — Level 2
Stratum IV — Level 3

Area D

Stratum I — Surface
Stratum II — Not present
Stratum III — Levels 1, 2, 3

Area E

Stratum I — Surface and level 1
Stratum II — Level 2
Stratum III — Levels 4, 5 and 6

In Area A, the surface and first 5 levels of debris contained a mixture of Arab, Byzantine and Roman-Nabataean sherds. However, levels 6 through 11, the last resting on bedrock at the foot of the great Nabataean wall, were homogeneous in that only Roman-Nabataean sherds were present. The stratification of the upper levels of Area B was similar to that in Area A except for a difference in the color and thickness of debris represented by each level. Strata III and IV were consistent as far as the pottery was concerned, the former containing only Roman-Nabataean, and the latter containing only Iron II. The stratigraphic picture of Area C was slightly different from that in Areas A and B, in that there were fewer levels of debris in each Stratum. In Areas D and E the absence of Stratum IV is doubtless to be explained as resulting from the extensive denudation of the Iron II period structures in the course of the building of the ramp and gateway during the Nabataean period.

The location of the buildings and area under excavation are represented on Pl. 85, *i. e.*, south of the area excavated in 1951, which is also designated on the contour and grid plan. The 1952 campaign confined its work to the area near the center of P9 on the grid. The numbered walls and rooms of the structures in the various Strata are represented on Pls. 86-93. The location of such walls are recorded on pp. 68-69.

3. Stratum I

The main building in this Stratum of Areas B and C was designated as Bldg. A; the presence of ovens in the floor, bins, household utensils, etc. indicated that it was part of a large dwelling area. The walls were standing in places about 1.50 m. high, the tops barely concealed by the surface debris. The rooms at the east had been excavated during the previous campaign. The main walls from east–west were without doorways, the south wall being about 1 m. in thickness and capable of serving as part of a defensive enclosure. The presence of some walls south of Wall 3 may indicate that the house extended in that direction and had been denuded by persons seeking building stones. Walls extended also north of Wall 1 indicating that only part of the house was excavated. The north–south walls abutted against Walls 1 and 3; only the walls at the northeast corner form a right angle, hence the rooms are irregular in floor plan.

At the west there appears to have been a courtyard in which was located the shaft to a cistern (Pl. 99). The main entrance to the complex of rooms was at the east of the courtyard (Pl. 36); at the southwest corner was a small enclosure, doubtless used for storage. East of the courtyard were two rooms with a doorway between, each room being roughly 6 by 7 m. and each being divided by a pair of pilasters which served both as room dividers and as buttresses for the main walls of the building (Pl. 32:1,2). The pilasters were evidently bases for arches—some of the voussoirs of which were found on the floor—which served to support a heavy stone roof. Only in Room 4 was this collapsed roof, consisting of rough, flat stones and packed clay, found on a dirt floor (Pl. 30:1,2). The pilasters or piers of the arches projected into the two rooms about 1 m. each, and were not bonded into the north and south walls. The voussoirs were irregular in shape, and only part of them could be found, so that it was not possible to estimate the original height of the building.

A distinctive feature of the construction was the reuse of stones from the earlier Byzantine and the Roman-Nabataean buildings in the area. Such stones included a Byzantine or Roman capital placed upside down at the base of a pier on which one of the arches rested (Pl 38:1), a well-cut pedestal stone (Pl. 38:2; 39:1,2) which was placed upside down to serve as a foundation of one of the house walls, an altar or pedestal base (Pl. 37:2 at r. of photograph), a well-cut pedestal base bearing the diagonal Nabataean dressing (Pl. 40:2), and circular column drums (Pl. 31:2 at left of measure). Rough stones and rubble were used with packed clay and small stones to complete the walls. They varied in thickness, *ca.* 75 to 90 cm.

The ovens were located in the stone floors and consisted of circular depressions about 90 cm. in diameter (Pl. 35:1,2). The bins were made of flat stones set upright in the corners of the rooms (Pls. 31:2; 32:2).

An examination of the floor levels makes it clear that the building went through two phases. Evidences of burning in some areas suggests an extensive burning which may have marked the end of the first phase. However, the earliest walls seemed to have been reused. They rest on a well-constructed pavement of flagstones (Pl. 34:1,2) at the east side of the building, their weight in some places causing a cracking of the floor. It was not possible to trace the building to which this earliest floor belonged, although it is probable that the floor plan of the second phase followed that of the earlier one. The first floor was marked by well-laid flagstones and a shallow drain cut into the paving stones (Pl. 34:2). At the west side of the building this floor had disappeared and the walls were built on a base of small stones and clay. At the east side of the building the floor of the final phase was made of irregular flagstones set on a level of clay and debris about 25 cm. thick.

The coins and pottery from the floors suggest that the first phase of construction is 7th or 8th century A. D. at which time a Byzantine or earlier flagstone pavement was used as a platform for some of the walls. Following this destruction and a period of abandonment, the house was rebuilt in the 12th or 13th century A. D. At the same time there were constructed some small rooms south of the large Roman-Nabataean building; although it was not possible to recover their floor plan, it ap-

pears that their south wall was the uppermost (Wall 1) of the two walls which were built on the great Nabataean Wall in Area A.[5]

4. Stratum II

All traces of Byzantine buildings in the area have been destroyed with the exception of the flagstone pavement on which Bldg. A. was constructed in Areas B and C, and possibly Wall 1 in Area A. If the excavations were to be extended to the north, it is probable that the remains of buildings for this period could be recovered, although the shallowness of debris between the Roman and Arab periods in the areas excavated suggest that the plundering for building materials in later periods has removed most of the walls. A single wall (No. 10 running through Areas B and C) above which parts of the south wall of Bldg. A. were constructed may belong to the Byzantine period (Pl. 87). However, its later facing on the north side in Area B plus the absence of adjoining rooms makes it difficult to assign it a date.

5. Stratum III

The most distinctive feature of this Stratum was the great Nabataean wall in Area A (Pl. 88, Wall 3; Pls. 90, 41:1-2, 42:1). The blocks were laid in headers and stretchers, the facing bearing the typical diagonal dressing of the Nabataeans. Twelve courses remain, the lowest resting on bedrock, native *ḥúwar*. The blocks vary in size from 1.13 m. to .70 m. in length and .52 m to .62 m. in height, being leveled with small stones placed among the blocks. The thickness of the walls is about .35 m.; it appears to have been built against earlier fill and walls. The east end of the wall was not excavated; at the west it appears to abut against a less well-constructed wall (Pls. 41:1; 42:2 at left) which may have been a part of a ramp leading from the south to the entrance of the city. The present height of the wall is about 6 m. In view of the difficulties and expense of removing the wall and excavating in the area along its north side, it was not possible to determine whether the wall was a part of the defensive system of the Nabataean city, or a retaining wall which was constructed in connection with the platform on which the large Roman-Nabataean building was erected. The level of Nabataean occupation at the west of the wall and opposite its upper courses, plus the soundings made by Dr. A. D. Tushingham during the next campaign,[6] make the latter more probable. If the height of the wall were such as to enclose the Roman-Nabataean building at its north, it would have presented an impressive view to persons entering the city. A later wall (No. 2; cf. Pls. 44:1; 89, 87 in Area E) resting on the Nabataean wall and extending over the steps west of that wall, may be Roman in date, although only four courses of it were found, but without associated occupation levels that could be dated. No buildings were found in the area excavated which could be assigned to either the Nabataean or Roman periods of occupation. This is doubtless to be explained by the fact that an open courtyard area and street existed at the west of the large Roman-Nabataean building.

Attention may be called to one architectural fragment (Pl. 40:1) which probably came from one phase of the Roman-Nabataean building; it was found in the debris near the Nabataean wall. Like it, the step surfaces bear diagonal dressing; in this case, however, there are traces of plaster still attached. The piece consists of two full steps plus fragmentary ones at the top and bottom. It reminds one of the altar steps found at Khirbet et-Tannur, although a more likely use is suggested by the "crow-foot" decorations of Nabataean tombs at Petra. Two such architectural pieces placed back to back would form a kind of crenellated ornament for the top of a wall. Such structures may still be seen in later Arabic buildings of North Arabia (cf. K. S. Twitchell, *Saudi Arabia* [Princeton, 1947], p. 66 and photographs of Badia Palace, near Riyadh, Najd; H. St. John Philby, *The Land of Midian* [London, 1957], opposite p. 80, photograph of Castle of Ibn Rumman at Taima).

It was not possible to determine the function or date of Wall 12 (Pl. 93; Area C, S. end) and Wall 7 (Pl. 87; Area B, single course wall). The former, faced with unhewn stones between which was rubble fill, was 3.58 m. in thickness and still standing to a height of 2.82 m., appears from its size to be a part of a city wall (Pls. 46: 1; 48:1, 2). Its bottom courses rested on bedrock in places and on the tops of walls that were dated to the Iron II (Pl. 49:2). It is possible that these walls (cf. Pl. 49:1) were a part of a rather crude defensive

[5] See top wall (No. 1) in Area A (Pls. 87, 89, 90); Cf. *Dibon I*, Fig. 4 and p. 18.

[6] *Dibon II*, pp. 16, 18-20; cf. 19:1.

system of the late Moabite period; quantities of Iron II pottery were found in Area C near the base of Wall 12. However, the function and date of the wall could only be determined, if at all, by excavating the mound at the western terminus of Wall 12 which may contain a small tower that overlooked the "gateway" area.

6. Stratum IV

With the possible exceptions noted above, the structures were the remains of house walls from the Iron II period. These appeared in both Areas B and C, although not close enough together to be able to reconstruct an over-all plan (Pls. 88, 91, 93). Later building and leveling of the area had removed the upper courses and broken into several parts of the walls.

A feature of Stratum IV in Area B was a mud-brick wall (No. 22, cf. Pl. 47:1, 2) which appeared to serve as the north wall of a room and other walls which were made of rough, unhewn stones. The bricks were *ca.* 34 by 14 by 10 cm. and were set in a *ḥúwar* probably water packed so that it pressed against and into the brick joints. The thickness of the wall was about 70 cm. At the east end of the wall was a bin about 55 cm. deep and about 1.00 m. in diameter which was lined with white plaster about 1 cm. in thickness. The bedrock in this area slopes toward the south; this doubtless explains the presence of several stone walls built against each other, in some places one on top of another, made necessary as water drainage toward the south weakened the foundation levels. In spite of very careful supervision and removal of debris in Area B, it was not possible to reconstruct a house plan, although there is good reason to think that a number of houses dating to *ca.* 850 B. C. existed in this area.

The same may also be said for the remains of Stratum IV in Area C. Here the walls were found to rest on bedrock, only one or two courses remaining (Pl. 45:1, lower left; 49:2; 50:1). Their size, about 50 cm. in thickness, suggest house walls; the stones appear to have been cut smooth on the outer surface. In the northwest corner of the room was found an oven with a two-handled cooking pot (Pls. 59:2; 72:3) in place (Pl. 50:2). The oven, about 85 cm. in diameter, was made of clay, shaped and heated to the consistency of coarse pottery or terra cotta. East of the oven was a similarly made structure, possibly another oven or storage bin, having a hole opening at the bottom on the north at floor level. In both cases, the upper parts were destroyed by fill, so that it was not possible to restore either structure. Approximately two bushels of carbonized grain were found on the earthen floor south of the ovens. It was possible to reconstruct one storage jar (Pls. 57:2; 72:2) from the room; it was doubtless used to bring grain from the threshing floor to the oven. In the same context was found a water jar (Pls. 57:1; 72:1) which probably supplied the water used in the baking process. Although Stratum IV remains were meager in Areas B and C, and were doubtless completely destroyed by the massive Nabataean structures in A, D and E, it is clear that Dhībân of the Omri-Ahab-Mesha period extended as far south as the "gateway" area.

There is no evidence of an occupational level for the Late and Middle Bronze periods. The presence of some Early Bronze sherds suggest that Dhībân was occupied during that period, but the buildings must have been located elsewhere on the *tell*, since the Iron II house walls rest on bedrock; it is unlikely that their construction could have removed every trace of an earlier occupation, if one existed.

CHAPTER II

The Southeast "Gateway"

Although some problems relating to the identification of this area as the location of the Gateway can be solved only by the removal of the great Nabataean wall at the east, and by extending the excavations both west and south of the area excavated, there are good reasons for designating this as the Southeast Gateway. Most of the early travelers who visited the site noted that the terrain was such as to make this the logical entrance, joining the "saddle" to the *tell* on which modern Dhībân to the south is located. Although it would be very expensive to clear the "saddle," and not very productive of stratified results, it would doubtless show this to be an elevated ramp which could be defended against enemies and at the same time provide easy access from the south *tell*.

However, the excavations uncovered no door-sockets, guardrooms or other features which are usually associated with gateways opening through a city wall. If such ever existed in this area of Dhībân, they have been removed by plunderers in search of building material or by continued rebuilding in the area. It seems more likely, however, the "gateway" was merely an open entrance into the city which could be defended from the ramp at the south or from towers located nearby (see Pl. 28:1, the mound located N. of the expedition tents). Elsewhere in Moab, as Glueck's explorations have shown, Iron Age, Nabataean, Roman, and even modern British customs of defending a city have resulted more often in the construction of military towers than in the extensive use of immense city walls such as at Jericho, Megiddo, Gibeon, etc. However, as the excavations at Ezion-geber have suggested, the early residents were capable of building walled cities with well-constructed gates and guardrooms.[1] But the evidence from Dhībân, as far as the southeast corner is concerned, suggests an open entrance rather than a gateway.

The main features of such an entrance are best preserved in Stratum III (Pls. 44:1; 45:1,2; 87). After the completion of the surveyor's plan of this Stratum, the walls of the latest phases of construction were removed exposing a well-preserved section of the entrance way. Quantities of egg-shell Nabataean pottery and one Nabataean coin were found among the paving blocks. The orientation of the entrance was due north–south forming about a 95° angle with the line of the great Nabataean wall at the east. The western limits of the entrance and its relation to Wall 12 are not entirely clear, but the width of the entrance appears to have been about 8 m. It was constructed of well-laid flagstone blocks, about 15 cm. in thickness, set in a clay mortar. Proceeding from south to north, the entrance way consisted of a landing about 2 by 8 m., a step 20 cm. high, a second landing about 2 by 8 m. and two steps, each 20 cm. high, followed by a third landing the precise dimensions of which could not be determined (Pl. 45:1). The pavement at the north was cut through by later building, and the exposed position of the entrance way at the south doubtless resulted in its destruction at the point where it joined the ramp or "saddle."

Traces of burning in the area may be associated with the conquest of the city in the early 2nd century A. D. by the Romans, who may have closed the entrance way by constructing a wall, part of which rested on the steps of the Nabataean period (Pl. 44:2). West of the entrance way were found quantities of lead, silver, a mold (Pl. 81:6), whetstones (Pl. 80:10) and two Nabataean egg-shell painted bowls (Pl. 55: 1,2), suggesting the presence of a small shop, doubtless in the open air since no house walls were discovered.

The evidence of an entrance way for the Iron II, Byzantine, and Arab periods is less clear than for the Nabataean period. However, the terrain is such as to make it highly probable that there was access to the city from this direction. At the west and north, and at a lower level than the Nabataean entrance were found rough stone walls, one of which in Area B (Pl. 87) was open at the east side. Resting on bedrock, these walls are not well preserved and are associated with no steps, doubtless because the gradual slope of the native rock made

[1] For an excellent discussion of such gateways see Nelson Glueck, *The Other Side of the Jordan* (1940), pp. 99-104.

it unnecessary to construct as elaborate an entrance way as was built in the Nabataean period. All that remains of an entrance way in the Byzantine and Arab periods are some paving blocks and sections of what appear to be drains for water leading from north to south. Doubtless a pavement leading into the city would require such drainage, both to collect the rain water and to prevent water damage to the pavement and entrance way. It is to be expected that subsequent excavations at the east and north of the *tell* will locate the main gateways to the city.

Several early visitors to Dhībân observed a ramp at the east side of the *tell*. Following Duncan Mackenzie's visit in 1910 he reported:

> The walls within (Dhībân) as they are visible to-day say nothing, but at the entrance of the East Ramp they are not altogether silent. Here the ramp in its ascent is so disposed as to seem quite clearly a common way of access not only to the Royal Quarter but to the adjoining part of the lower city toward the north end of the site. It was, indeed, this very way we ourselves had taken in our first *passeggista archeologica* over the city. It was thence we made our way amid the maze of Arabic houses to the Northwest Entrance and the West Ramp of Dibon.[2]

In the hopes of finding some evidence for determining the date of the East Ramp that might be useful in the interpretation of the southeast entrance way, a sounding was made in the middle of the East Ramp. The sounding, 1.50 by 7.50 m. was designated as Area F; its location is marked by X on Pl. 85, about midway between the southeast corner and the reservoir; the reduced level is 88.146 m. at the west end on surface. Because of considerable washing from the east slope of the *tell*, it was not possible to detect the floor level of the ramp. The absence of paving blocks suggests that it was a ramp or causeway made of packed earth. The presence of Roman-Nabataean pottery may be explained as due to washing from the levels above, or that the ramp may have been in use at the same time as the southeast entrance way. Because of the restricted area of the sounding, it was not possible to penetrate to the foundations of the ramp, so it could not be determined whether or not this was an access to the city in the Iron Age period. However, this seems probable in the light of the practice of preserving earlier features of the city in subsequent building periods. In this connection, attention may be called to Mesha's report: "It was I who built Qarhoh (another name of Dibon), the wall of the orchards and the wall of the citadel; I also constructed its gates and I built its towers and I built the king's palace . . ." (Mesha stele, lines 21-23).

[2] "Dibon: The City of King Mesha and of the Moabite Stone," *PEFQS*, 1913, p. 70.

CHAPTER III

The Water Supply

Although the Wâdī Dhībân, which approaches the *tell* from the east and circles it on the north and west sides, could have supplied the city with water during the rainy season, and although there may have been some springs in the valley which have since dried up, it is clear that the inhabitants of Dhībân in every period of occupation developed the art of water conservation to a high point. Only by so doing was it possible to maintain a large population in the city.

Literary evidence preserves the memory of the importance of wells or cisterns in the East Jordan area in the time of the invading Hebrews. There was a willingness to pay for the water used in the land of Edom (Num. 20:19), and there was a tradition that princes and nobles had been involved in the construction of wells or cisterns in the vicinity of Moab and along the King's Highway (Num. 21:17,22). This is further attested by Mesha's report with reference to his building activity at Dibon (Qarhoh): "I built both of its reservoirs for water inside the city. And there was no cistern inside the town at Qarhoh, so I said to all the people, 'Let each of you make a cistern for himself in his house.'" (Mesha stele, lines 23-25).[1] The two features of water conservation in the 9th century B.C. were cisterns (*bîr*) and reservoirs (*ʿaṣhûḥ*); traces of both were found in the course of the excavations, although their dating to specific periods of occupation remained tentative.

Mesha's comment seems to indicate that the reservoirs were the result of a type of public works program, and the cisterns constructed in the houses (probably in the courtyards) were the result of private effort encouraged by the king. Although the text of the Mesha inscription at this point is somewhat obscure, it appears that the reservoirs would have been built in the valley adjacent to the city itself. The expression "inside the city" is clear, but the extent of the city has not been determined, and it is probable that it was considered to include, not only the mound itself, but the slopes and valleys nearby.

While it is possible that reservoirs, like the Pool of Gibeon, will be found[2] in a dwelling area within the city walls, the only trace of such a structure now known at Dhībân is located in the valley east of *tell*. This reservoir or pool is scarcely noticeable from the ground, but an aerial photograph shows it to have been of circular construction (Pls. 28:2; 85). Its depth was not determined, but it is 26.00 m. in diameter, having a reduced level of 88.34 at its center, which is located about 95.00 m. east of the midpoint between the two arches of Wall 4 in Area A (Pls. 42:2; 90). Whether the walls were of packed earth or were cemented in some way has not been determined; to do so would involve an expensive operation. However, there is no doubt that it served as one of the reservoirs of the city, and that its large capacity would be a welcome supplement to the supply of water from the individual cisterns.

There is some evidence that the reservoir was filled, not only by the natural watershed of the adjacent slopes but by an aqueduct which transported rain water collected by means of conduits located in the city. Such conduits were constructed so the water would flow from north to south (Pls. 33:1, 2; 34:2; 32:1 where a single stone from an earlier water channel appears to have been placed upside-down in a wall of the Arab house). None of the conduits was found to connect with Wall 4 south of the great Nabataean wall, although they are oriented in that direction. One such conduit made of upright stones measured 20 cm. in width, 25 cm. deep, and was covered with flat stones. For the Nabataean period, they would have been in an exposed position east of the entrance way where they would have been rather easily broken by the Roman construction in the area. Although it is possible that Wall 4 (Pls. 42:1, 2; 43:1, 2; 89; 90) served some other purpose, Mr. Gerald Lankester Harding and others who examined it, agree that it is best explained as the remains of an aqueduct. An argument against

[1] W. F. Albright, "The Moabite Stone," *ANET*, pp. 320-21; cf. Van Zyl, *Moabites I*, pp. 176, 189-192; Addendum I, for a recent commentary on the Mesha stele.

[2] James B. Pritchard, "The Wine Industry at Gibeon: 1959 Discoveries," *Expedition*, University Museum of the University of Pennsylvania, Vol. 2, No. 1 (1959), pp. 20-21.

such an identification is the fact that no traces of it appear at the southeast corner of the *tell* or in the terrain leading to the reservoir. However, this may be explained by the extensive building at the corner of the city,[3] by its exposed position in the valley which would be the first area plundered by persons seeking building material for the south *tell*, and by the fact that its foundations may still be buried in the area west of the reservoir.

The aqueduct was built on bedrock about 30 cm. south of the Nabataean wall and parallel to it. An expanse of about 5 m. was uncovered; at its western terminus, it appears to be covered by the stones of the ramp; its eastern terminus was not excavated because of a lack of time and funds required to clear the debris which covered it. The most important feature of the structure was the arches. Their dimensions, 97 cm. in width, 1.70 m. in height and 50 cm. in thickness, are such as to make them too small for shops or dwelling places. The arches are semicircular in shape and are fashioned of well-cut stones. Above the arches, the aqueduct stands to a height of about 4 m. above bedrock. Its orientation toward the reservoir and the reduced level, even at its base, 91.46 m. as compared with the present reduced level of the reservoir, which is 88.34, make it likely that the aqueduct served as a means of transporting rain water collected in the city to the reservoir outside. In view of an association of the Roman Emperor Septimius Severus with Dhībân, and because of the fact that the aqueduct must post-date the great Nabataean wall, it is possible that it was constructed under the impetus of the Severans' interest in such structures so well-known at Rome and elsewhere.[4]

No attempt has been made to map the locations of the numerous cisterns at Dhībân; however, during the first campaign, sixty-seven were catalogued and thirty more were found on the slopes of surrounding valleys.[5] To this number may be added three more cisterns whose entrances were buried by debris that was removed during the second campaign. The present total of one hundred such cisterns is certainly only a fraction of the number which may yet be found. There is no way of knowing how many of them were in use during any one period of occupation, but it is clear that the inhabitants in each age must have depended to a large extent for their water supply on the cisterns located in the areas adjacent to their houses.

One such cistern was located in a courtyard of Building A (Pls. 36:1; 86, Area C; Pl. 99). Two drains, one from the east and the other from the north, leading into the shaft were in Stratum I indicating that the cistern was in use as late as the 12th-13th centuries A. D. About 1 m. of debris was found on the floor of the cistern which contained no sherds earlier than Byzantine. The cistern was completely cleared disclosing a chamber of the following dimensions: From the top of the shaft to the floor—9.70 m.; depth of shaft—3.80 m.; depth of chamber—5.90 m.; the average diameter at the floor—6.50 m. The location of the shaft north of center and the cut-backs in the chamber make it appear that the cistern is as old as the Iron II period, having been reused in subsequent periods. The walls and floor of the chamber were covered with a plaster composed of small pebbles and some sherds set in limestone. Pieces of the plaster, about 4 cm, in thickness, had disintegrated in places revealing the native *ḥuwar* in which the cistern was cut. Probably the chamber itself was hollowed out of the bedrock from a point slightly below the bottom of the stone-lined shaft.

The capacity of the cistern was computed to be 35,000 gallons (U. S. measure). Although this may have been one of the larger cisterns, there is no doubt that by the use of a number of such cisterns, with careful attention to supplying them by conduits during the rainy season, sufficient water could be stored to sustain a large population.

[3] *Dibon II*, p. 21 which reports thirty-six levels distinguished within a depth of about 5.5 m.

[4] E. B. Van Deman, *The Building of Roman Aqueducts*, Carnegie Institution of Washington (1934), pp. 18-19; Thomas Ashby, *The Aqueducts of Ancient Rome*, edited by I. A. Richmond (Oxford, 1935), pp. 14; 245.

[5] *Dibon I*, p. 10, footnote 12.

CHAPTER IV

The Grain

There is no doubt that Dhībân shared with other parts of Moab a reputation for being a very fertile area; there are still fertile fields, near the city and on the plains north toward Medeba where quantities of wheat are harvested each year in May (Pl. 29:1). Although Mesha, king of Moab, was referred to as a sheep breeder (II Kings 3:4), his people were also farmers who engaged in the raising of grain and other produce. This is implied in the expressions "the fruitful land of Moab" (Jer. 48:33, although the Hebrew of the vs. is obscure), "your fruit and your harvest" (Isa. 16:9), and in the flight of Elimelech's family from Bethlehem to Moab to escape a famine (Ruth 1:1-2).

Against this historical background, the discovery of grain at Dhībân has special significance.[1] However, it is not unique, since grain was also found during the course of the excavations at Tell el-Kheleifeh (Biblical Ezion-geber) conducted by Dr. Nelson Glueck in 1938, and at Dhībân by Dr. Wm. H. Morton, who conducted the latest campaign in 1956. It is apparent that farming, as well as grazing, the development of orchards, water conservation, and commercial activities played a part in the growth of Moabite culture.

The grain found during the second campaign at Dhībân came from Stratum IV, Area C, piled in places 20 cm. deep on the bedrock (soft *ḥúwar*) which served as the floor of a room near the southeast entrance way. More than a bushel of the grain, which was almost completely carbonized and would obviously not germinate, was collected (Pl. 57:3). It was found in great quantities in the vicinity of a badly damaged terracotta oven located in one corner of the room (Pl. 50:1, 2). Only the lowest courses of the house walls were located, and they were damaged to such an extent that it was not possible to reconstruct the floor plan. It is probable that a sudden destruction of the area covered the grain with debris in such a way as to seal it and assure its preservation. The oven was also broken at the top so it could not be reconstructed. Near the oven was a structure of similar brown terracotta, or baked clay, which may also have been an oven or a storage receptacle (Pl. 50:2, lower right). In the oven was a cooking pot (Pl. 72:3) *in situ* on the carbon remains of the fuel used for baking. In a bin located in the same general area of Stratum IV was found a storage jar which had been broken in ancient times but could be restored (Pls. 57:2; 72:2). The jar and others like it must have been used during the early part of Iron II for the storage of grain brought from the fields and threshing floors near the city. From the same context and period came a water jar with a small hole in the side which seems to have been the result of a defect in the shaping of the clay; it was later patched with a limestone or *ḥúwar* material (Pls. 57:1; 72:1).

A sample of the grain was sent to Dr. Harold N. Moldenke who examined it and arranged for its analysis by Dr. Jason R. Swallen, Head Curator, Department of Botany, Smithsonian Institution. Because of the Old Testament references to wheat (Judg. 15:1; Ruth 2:33; I Sam. 12:17, etc.) and barley (Judg. 7:13; I Kings 4:28; II Kings 7:16, etc.), it was desirable to secure, if possible, a classification of the grain as to type. Analysis by Dr. Moldenke was not possible because of the fact that the necessary herbarium material was not available to him. Mention should be made of his excellent study *Plants of the Bible* (Waltham, Mass., 1952). In his discussion of wheat (cf. p. 230-233) three observations are relevant to the present discussion:

> There is no doubt that the "wheat" of the Bible is the commonly cultivated and well-known summer and winter wheat of the present day, *Triticum aestivum*. . . . Five kinds of wheat are native to and still wild today in Palestine and neighboring lands and at least 8 others are cultivated there. It is very probable that most or perhaps even all of these were also used in Biblical days. The native kinds were undoubtedly much more abundant there then than now . . . Three varieties of wheat are now very commonly cultivated in Palestine: on the maritime plains there is a white short-bearded form, while inland there is a short-stemmed, long-bearded, thick-set, coarse-grained form and also a form with longer stems and coarse black beards and husks.

The identification of ancient Moabite wheat with any of the types grown in modern Jordan would be uncertain and depends on an *a priori* reasoning

[1] A preliminary report on the grain was published in *BASOR*, No. 146 (April, 1957), pp. 6-10.

which holds that a conservative tendency of farmers in any locality would tend to cause them to plant the varieties of wheat which grow well in that climate and soil rather than to introduce a new variety. As Dr. Moldenke's observation suggests, a scientific identification would depend upon the presence of stems, beards and husks. These were not present in complete form in the Dhībân grain, because it had been threshed before being brought to the room in which it was to be prepared for baking.

Dr. Swallen's report stated:

> You may quote me to the effect that the grain you found in Dhiban, Jordan, is a wheat relative, although perhaps it might be better to say 'probably a wheat relative.' The identification of seeds which have practically turned to carbon is very difficult and it is better, therefore, not to make a too definite statement. Unfortunately, our herbarium material very seldom has any caryopses for comparison.[2]

Although identification of the Moabite grain as wheat must remain tentative for the time being, it is probable that specimens of *ḥittāh* (pl. *ḥittîm*), mentioned often in the Old Testament have been recovered.[3] In any case, the presence of the grain in great quantities and the evidence of careful preparation for its cultivation, storage and baking into bread attest its importance in the agricultural life of ancient Dibon.

In addition to a type classification of the grain, a sample has been dated by the widely-used radiocarbon test. Because of the opinion expressed by several scientists that fall-out from atomic bomb tests may be having an effect which could invalidate the accurate measurement of carbon isotope 14 in organic material, there was a delay in arranging for the test on a specimen from Dhībân. However, such tests are being used with remarkable results; in this case the report is most helpful with reference to Moabite pottery where the ceramic chronology is in the process of being established.[4]

The writer wishes to express his appreciation to the Magnolia Petroleum Company and to Dr. C. I. Alexander, Manager of the Field Research Laboratory of the company in Dallas, Texas, for making the test possible. His report:

> Dating of the wheat sample which you submitted in 1955 has been completed. Delay in obtaining a date on this sample has been associated with your desire for a statistical accuracy of ± 50 years. This accuracy was not attainable with the small size counter we were then using. It was decided to postpone measurement of your sample until our own work would demand the use of a large counter. Since samples justifying the use of a large counter have not materialized, we have obtained the best possible date for the grain sample by use of the small counter.
>
> Three periods of counting were used, giving an average age of 2,815 ± 165 years B. P. A number of background and modern sample determinations were made to improve the accuracy.[5]

As the test indicates, the span of history, from about 1020 B. C. to 690 B. C. covers a long span of Moabite history from the accession of Saul to the reign of Hezekiah.[6] A median date of 858 B. C. would be in complete accord with other evidence making it likely that the margin of error allowed for the carbon-14 test is greater than necessary. Prior to learning the results of the test, the writer had invited Dr. William F. Albright and Père Roland de Vaux to examine the pottery found in Stratum IV associated with the grain. These independent examinations resulted in an identical date for the pottery of about 850 B. C. based on similarities of ware, shapes of handles, rims, etc. with Palestinian pottery and vessels from other sites in ancient Moab. This would also be in accord with the dates of the reign of King Mesha as implied in his stele. Although the exact dates are not known, the fact that he engaged in several wars, carried out an extensive building program and expansion of the borders of Moab, plus the reputation he gained among the Hebrews (I Kings

[2] The writer wishes to express appreciation to Dr. Swallen for his analysis of the grain and for permission to quote from his letter of July 14, 1954.

[3] Cf. Gen. 30:14; Judg. 6:11; 15:1; Ruth 2:23, etc.

[4] For an excellent discussion of the use of Carbon-14 in dating ancient organic materials, see Lyman J. Briggs and Kenneth F. Weaver, "How Old Is It? Telltale Radioactivity in Every Living Thing Is Cracking the Riddle of Age," *National Geographic Magazine*, August, 1958, pp. 234-255. Reference is made in the article, although not by naming the site, to the Dhībân grain which the writers examined at the Magnolia Petroleum Company research center (p. 242). The present writer made no reference to the date of the grain and its relation to Ruth the Moabitess, which must, of course, be decided on literary as well as archaeological evidence.

[5] From Dr. Alexander's report of March 5, 1957.

[6] A recent statement concerning the use of radiocarbon dating in connection with archaeological materials is found in Gus W. Van Beek's article, "A Radiocarbon Date for Early South Arabia," *BASOR*, No. 143, pp. 6-9. It is interesting to note that the span of history parallels within a few years the span of history covered by the test of Moabite grain.

3:4 ff.), even to the acknowledgment of their defeat at his hands (cf. Kings 3:22, which refers to Mesha's sacrifice of his eldest son and implies the efficacy of the act in causing Israel's defeat), all combine to suggest a rather long reign, probably from about 870 to 840 B. C.[7] Mesha reports that his father, whose name is uncertain because of a break in the text (probably Chemosh-melek or Chemosh-khan),[8] ruled over Moab for thirty years (*Mesha stele*, line 2). Hence, the grain may properly be considered as coming from the reign of Mesha or late in the reign of his father.

An incidental result of the analysis of Moabite grain and the archaeological evidence associated with it is that it helps to explain this ancient land as a place of refuge for Israelite families. It will be recalled that David is reported to have placed his parents with the Moabite king (I Sam. 22:3-4), and that the family of Elimelech went from Bethlehem to sojourn in the country of Moab (Ruth 1:1 f.). It is possible that such flights to Moab were not uncommon in ancient times, and it is probable that such a refuge was selected, not merely because Moab had escaped the military invasions which plagued Israel and Judah, but rather for the reason that Moab, with its fertile plains, was an important "bread-basket" of ancient Palestine.[9]

[7] Van Zyl, *Moabites I*, p. 144.

[8] *Ibid.*, pp. 182-183.

[9] Modern commentaries, such as the one by J. J. Slotki, *Ruth, Introduction and Commentary, The Five Megilloth* (The Soncino Press, 1952), p. 41, which explain famine in Judah and migration as due to military invasion, fail to take account of the possibility that Moab presented, as it still does today, an attractive haven because of its normally excellent crops of grain.

CHAPTER V

The Pottery

1. General Observations

Although considerable progress has been made in the study of Moabite pottery in recent years, some of its features are much less clear than is the case with pottery from the regions west of the Jordan River. Many forms found in Moab are identical with those found in Palestine and elsewhere in East Jordan, but some are distinctive and cannot be given an absolute dating until the history and the pottery of Moab become better known. In the main, the chronology of the pottery in Moab, as far as the main periods, Early Bronze, Late Bronze, Iron, Roman-Nabataean, and Byzantine-Arabic can be considered to be established. Thanks to the surface explorations of Albright and Glueck, and the tomb excavations of Harding and others, many of the forms in each of the above periods have been properly identified. However, it is not yet possible to assign all the pottery to specific centuries as is the case with much Palestinian pottery.

The area at Dhībân excavated in 1952 was confined to the areas near the southeast gateway and the tombs. Although the excavations reached bedrock, thus exposing all the strata in this region, it cannot be concluded that the excavations established the chronological sequence for the entire city. It must be observed, however, that the pottery of this particular area tends to support the conclusions reached by Glueck in his surface exploration of Moab.[1] The presence of some Early Bronze sherds suggests that elsewhere at Dhībân, there will be found an extensive city of this period. No buildings or walls were found that could be assigned to this period. The absence of both buildings and pottery that can be assigned to Middle and Late Bronze may be said to be in accord with Glueck's conclusion that there is a gap in sedentary occupation in East Jordan, including Dhībân, from the 20th to the 13th centuries B. C.[2]

The pottery sequence likewise supports the view that there was a flourishing civilization at Dhībân through the period from the 13th to the 8th centuries B. C. For the beginning of this period, that is Late Bronze and Iron I, the picture is not yet clear as far as Dhībân is concerned. The Old Testament references to the Moabites, especially in the time of Sihon, make it certain that Moab was strongly fortified, and that it contained a number of important cities. But subsequent excavations at Dhībân will be required to determine whether or not Dhībân was among such cities. However, the presence of a few Late Bronze and Iron I sherds in Areas B and C are evidence for the conclusion that Dhībân was occupied, at least, during the years directly before and after 1200 B. C. For the area excavated, the key date in the Iron II sequence must be considered to be about 830 B. C., that is, the approximate date of the Mesha stele. The inference from this stele that Mesha's father, Chemosh-melek(?) was a Dibonite, and that Qarhoh is another name for Dibon, may be properly considered reliable literary evidence for the occupation of Dibon in the early part of the 9th century B. C.[3] The dating of the pottery supports this view; the crude house walls built on bedrock in the area under excavation, plus pottery forms that are late Iron I and early Iron II, suggest a date in the 11th and 10th centuries B. C. It is probable that an earlier settlement existed, but it must be sought elsewhere, probably near the center of the *tell*.

Most of the Iron II pottery can be safely assigned to the period of Omri-Ahab-Mesha and the following century. This is true for the pottery from the *tell* and that from the tomb, although in both cases it is not possible to determine a precise date, whether at the end of the 7th or the early part of the 6th century B. C., when *Dhībân* was abandoned. In any case, there is a gap in the pottery sequence from about the beginning of the 6th century B. C. to the Roman-Nabataean period in the area excavated.[4]

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[1] *EEP III*, p. 268.

[2] *EEP IV*, p. 423.

[3] Cf. W. F. Albright's translation of the opening lines of the Mesha stele: "I (am) Mesha, son of Chemosh-(. . .), king of Moab, the Dibonite—my father (had) reigned over Moab thirty years, and I reigned after my father,—(who) made this high place for Chemosh in Qarhoh . . . ." J. B. Pritchard, ed., *ANET*, p. 320.

[4] Cf. *Moabites I*. It is, of course, possible that some Moabites continued to live in the area during this period,

For this latter period, and also for the Byzantine-Arabic periods, many pottery forms were excavated. To each period, the forms can be assigned with reasonable certainty. That is, the pottery designated as Roman-Nabataean is similar to that known elsewhere in East Jordan and in Palestine from the 1st century B. C. to the 3rd century A. D. However, within these centuries, dates can be assigned only in terms of probability, and except for some imported ware of the Romans, and the so-called "egg-shell" ware of the Nabataeans, it is not possible to assign the pottery to a specific century. Except for the flagstone pavement, no structures in the area excavated can be safely assigned to the Byzantine period. At Dhībân, as elsewhere in the Near East, it is probable that the cultural artifacts of early Arab culture in the 7th and 8th centuries A. D. did not differ greatly from those produced by Byzantine artisans who served the Arab conquerors. In any case, the Byzantine and Arab pottery from the early phase can be safely assigned to the period from the 6th to the 13th centuries A. D. The problems of assigning more specific dates within this general period are suggested by Glueck's statement: "The study of Byzantine and Arabic pottery has been badly neglected in Palestine."[5] The two phases in the construction of Building A are paralleled by an early and late phase of pottery of the Arab period. Similarities with certain forms at Mefjer and Mt. Nebo suggest that they may be safely assigned to the early period of Arab occupation of Dhībân; that is, the 8th and 9th centuries. Likewise, affinities between other forms at Dhībân with the later forms which have been carefully dated at Abū Ghōsh, the later period of Mefjer, and at Athlit, make it reasonably certain that Arab pottery types of the 12th and 13th centuries A. D. are well represented at Dhībân. See Chapter VII for a consideration of the ways in which the coins confirm the pottery sequence.

Some delay in the publication of the pottery from the 1952 season at Dhībân has been occasioned because of the hope that there would be a break-through by physicists and chemists who are working on new tests for dating ancient materials. As far as the Iron II pottery is concerned, which was associated with the grain found in Area C near the oven located on bedrock, an absolute date of *ca.* 850 B. C. can be assigned by reason of the Carbon-14 dating of the grain. It is to be expected that a comparable break-through will come so that pottery from Moab in the Roman-Nabataean and the Byzantine-Arab periods can some day be dated to specific centuries, or even, to specific decades. However, the scarcity of organic materials from these periods at Dhībân, plus the cost of testing for Carbon 14, have handicapped the absolute dating of these types of pottery as far as the present study is concerned.

It may be reported that the writer has engaged in considerable correspondence and research in an attempt to secure satisfactory criteria for absolute dating of Roman-Nabataean and Byzantine-Arab pottery. The types of tests being developed are in such a preliminary stage that the scholars engaged in the research do not claim certainty for their results. However, it can be reported that sample sherds from Dhībân have been accepted by several laboratories where work is in progress on new methods for dating inorganic materials such as pottery.

Preliminary reports of the excavations at Petra being conducted by the British School of Archaeology are encouraging; there is every likelihood that the stratification at Petra will make possible considerable refinement in the dating of Roman and Nabataean pottery, not only in that city, but in others such as Dhībân. However, the writer has not been able to examine this new evidence, and has based his observations on the pottery from these periods on principles learned from the earlier excavations at Petra, Khirbet et-Tannur and Dhībân, and from work with Glueck and Harding.

The writer's investigations have led him into a consideration of two laboratory methods of testing pottery for possible date. While the results have

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but the great cities were abandoned following their destruction. Van Zyl has summarized the literary evidence which indicates the conquest of Moab by Nebuchadrezzar in 582 B. C. and in the downfall of the Moabite civilization in the first quarter of the 6th century B. C. "After this depopulation of the country, we still have some references to individuals of Moabite origin (Ezra 9:1, 12; Neh. 13:1; Dan. 11:4), but there can be no reference to the Moabite nation or state after the first two decades of the 6th century B. C.," p. 158. The pottery sequence at Dhībân suggests that the city suffered the same fate as the rest of Moab during the Persian and Hellenistic periods.

[5] *EEP III*, p. 267. An extensive Byzantine occupation along the side of the *tell* is certain. Father Sylvester Saller, during a visit while the excavations were in progress, pointed out the remains of the walls and apse of a Christian Chapel on the surface at the center of Dhībân, which he had observed during earlier explorations of the region.

not been satisfactory in either case up to the present time, possibly because the methods involved have not been developed to the point where they can give significant results, a mention of them should be made. First, there is the test involving spectroscopic analysis. This, plus other testing procedures, can be used to determine the hardness, original firing temperature, porosity, and the presence of certain minerals in the clay.[6] However, the correlation of the statistical results has not yet yielded the desired results in terms of dating the pottery samples. The writer wishes to express his appreciation to Messrs. David Havens and Bob Doyle of Lexington, Kentucky, for the tests they conducted on specimen sherds from Dhībân making use of a Norelco X-ray defraction machine. The tests of sherds normally dated as Iron II, early Roman and late Nabataean, indicated the composition included rare earth, magnesium, lead, and iron oxide. Except in the case of iron, the differences were not appreciable; the very slight difference in the intensity of iron was not considered significant as a possible clue to the date of the specimens. Because of these results, plus unknown and variable factors such as the source of the clay, the effect of the original kiln firing, the effect of deposition in sealed versus unsealed strata, and different types of color agents used in decoration, it must be concluded that X-ray defraction and spectroscopic tests have not yet been developed to the point where they can be used to date pottery. However, the remarkable advances made in such laboratory tests are hopeful for the future usefulness of such methods.

The same may be said for the dating of pottery by measurement of thermoluminscent glow. Instruments have been developed for use in measuring the thermoluminscence of ceramic material, lava flows, and other materials which have been heated in the past. Pottery samples from Dhībân have been accepted for testing, but the procedures are not developed sufficiently to provide a reliable dating. However, the discovery is significant that there is radioactive decay of uranium, thorium, and certain isotopes of potassium, present in all earth materials, which is accompanied by the emission of alpha, beta, and gamma rays that can be measured in terms of thermoluminescence. It is to be hoped that investigations along these lines may be developed to the point where an inexpensive laboratory test to establish the date of ancient pottery may be perfected.

[6] Philip C. Hammond, Jr., "Pattern Families in Nabataean Painted Ware," *AJA*, 63 (1959), pp. 371-382. For a report of a test of oxygen and its two isotopes, O^{17} and O^{18}, to measure historic time, see W. F. Albright, "Digging into the Past," *An Outline of Man's Knowledge*, ed. Lyman Bryson (1960), p. 306.

2. Iron II Pottery

There is no doubt that most of the Iron Age pottery must be assigned to the 8th and 9th centuries B. C. Although there are uncertainties as to the chronology of Moabite pottery for the two preceding centuries, that is late Iron I, it is probable that some forms are to be assigned to this period.[7] For example, the two burnished bowls that are painted in bands of red bordered with black (Pl. 77:14 and 15) resemble sherds discovered by Glueck at Ṭawīlân.[8] He designates them as Edomite painted ware, cites parallels with Moabite sherds, and suggests that both are EI I pottery. The two bowls from Dhībân were not found in a stratified area but in the tomb area, actually in a sounding near Tomb J 3. Although most of the sherds associated with them may be safely designated as Iron II, it is possible that this type of Moabite painted ware should be considered late Iron I, coming perhaps from tombs of that period east of the *tell*, or from a settlement in that area dating to that period.

Two other painted sherds, Pl. 78:5 and 13, must be similarly designated as late Iron I or early Iron II. The former is a fine buff ware, with wheel marks showing on the inside, black and orange horizontal line decoration, and a lattice decoration in orange. The latter is a similar ware, but is decorated with painted reddish-orange chevrons and dots, and with some lattice decoration on the rim. Both were found in soundings in Area J near the tombs and were thus in a context which could not be dated. Glueck cites similar examples from Edom, designating them as being decorated with a "trellis pattern," and dating them EI I.[9] In one of the Megiddo tombs was found a bowl having some similarities, especially handles and lattice

[7] Van Zyl, *Moabites I*, presents a recent summary of Moabite pottery calling attention especially to Albright's early discovery of Moabite ware at Kerak, pp. 34-36. See also Tushingham, *Dibon II*, pp. 23-25, for a brief discussion of pottery from Moabite tombs, with parallels from Tell abu Hawam using B. Maisler's revised chronology for this site.

[8] *EEP II*, pp. 127-135.

[9] *EEP II*, p. 129.

decoration, with DT 174 (Pl. 78:13), although the vessel is earlier than the Dhībân sherd.[10]

In addition to the preceding, the only vessels or sherds that may be earlier than the beginning of the 9th century B. C. are D 3088-10, a ledge handle (Pl. 74:9), which is EB III-IV; D 3088-4, jar rim (Pl. 76:12), which R. deVaux dated as LB or Iron I; DT 107, juglet (Pl. 77:8), which has some similarities with the so-called Cypro-Phoenician juglets;[11] several bowl rims such as DT 175 (Pl. 78:14) and DT 179 (Pl. 78:15); cooking pot handle D 3205-3 (Pls. 63:10; 74:6); and three lamps including DT 177 (Pls. 59:5; 79:2), DT 178 (Pls. 59:6; 79:1), and DT 72 (Pls. 58:10; 79:8). If the lamps are assigned a date in the 11th or 12th centuries B. C., it must be assumed the Tomb J 3 in which they were found was used over a period of three or four centuries, which is unlikely, or that they were brought to the tomb from an earlier one, since the bulk of the pottery from Tomb J 3 must be dated to the 8th and 9th centuries.

Except for the preceding, Iron II pottery has many parallels with Palestinian pottery from Tell Beit Mirsim, Tell en-Naṣbeh, Lachish, Beth-shemesh, Beth-zur, Megiddo, and Hazor (see below). In view of the fact that well-established cities existed in Moab prior to the settlement of the Hebrews in Canaan, it might be thought that some of the Iron Age forms could have developed a century or so earlier in Moab. However, the Old Testament evidence, indicating an association between Hebrews and Moabites in the time of Saul and David as well as in the Omri-Ahab-Mesha period, suggests that the pottery sequence in Moabite cities paralleled chronologically the sequence in Palestine. Even closer parallels are those with pottery from Iron Age tombs discovered in Amman, Sahab, and Meqabelein, sites located north of Dhībân.

But some of the Iron II forms must, for the present, be considered unique. A water jar (Pls. 57:1; 72:1), and another large jar (Pl. 72:5), found together in a Bin, Stratum IV, Area B, have no close parallels. This is not surprising in view of the fact that vessels this large have not been found in the Iron II tombs of eastern Jordan thus far excavated. A cooking pot (Pls. 59:2; 72:3) found associated with grain dated by the Carbon 14 test to about 850 B. C. is handmade and has no close parallels.

A deep bowl, also found in the Bin of Area B, is similar to such bowls found at Tell Beit Mirsim, Tell en-Naṣbeh and Lachish, although specimens from the first two sites appear to be earlier, and those from the last site may be later (cf. Pl. 57:2; 72:2 and description in Catalogue). A four-handled bowl (Pl. 72:4) from Tomb J 3 is similar to one excavated in an Iron Age Tomb at el-Jib (Gibeon) by Dr. Awni K. Dajani (see references in Catalogue, Pl. 72:4). However, the Dhībân bowl, judging from the rim and handles, as well as from associated tomb pottery, seems to be later than the specimen from Gibeon.

The small bowls and the jar rims (Pl. 73:1-14) have parallels with similar vessels from Tell en-Naṣbeh, Tell Beit Mirsim, Sahab and Meqabelein (cf. Catalogue descriptions of Pl. 73). Harding, who excavated the last two, and noted some similarities between the bowls from the two tombs, assigns a 7th—early 6th century B. C. date to Meqabelein, and a 9th—8th century date to Sahab. The latter would be preferable as far as the Dhībân specimens are concerned and is in accord with materials from Tell en-Naṣbeh and Tell Beit Mirsim. The pitcher, jar, and bowl rims and handles drawn on Pl. 73:1-8 may be either late Iron I or early Iron II. Comparative materials and references in the Naṣbeh publication (see Catalogue description on Pl. 73:1-8) suggest a date from 900 to 600 B. C.

The bases and rims on Pl. 75:1-10 are Iron II, although it is seldom possible to date them more closely within this period. The tripod cups (Pls. 75:1; 78:2) are similar to those reported at Tell en-Naṣbeh as dating 950 to 650 B. C. A wheel burnished bowl with a high ring base (Pl. 75:3) is similar to one from Meqabelein and must be dated to the 9th-8th century B. C. A comparison of the rims on Pl. 75:11-20 with those found at Tell en-Naṣbeh, Tell Beit Mirsim, Sahab, and Meqabelein makes it clear that they are to be dated from *ca.* 900 B. C. to 600 B. C. Iron II rims on Pl. 76:1-16 span the same period, Nos. 3, 9, 10 being as early as 900 B. C., Nos. 4, 5 and 14 hardly earlier than the 7th century (see Catalogue description and references).

The juglets and pitchers on Pl. 77 have their closest parallels with similar vessels from tombs at

[10] *Megiddo Tombs*, Pls. 13:24; 94:14.

[11] For an excellent discussion of the evidence pertaining to the dating of Cypro-Phoenician juglets, see Gus W. Van Beek, *BASOR*, No. 124, pp. 26-28; No. 138, pp. 34-38. DT 107 was found in Tomb J 3: what is said about the lamps mentioned above would apply to the juglet as far as the dating of the tomb is concerned.

Sahab, Meqabelein, and Amman. All except Nos. 5 and 6 are from Tomb J 3; they are from Sounding 3 in the tomb area. The former is similar to a juglet from Sahab (Fig. 7, 63); the latter, a decanter, also has parallels from Sahab (Fig. 6, 57) and from Beth-zur (Pl. IX, 5) which Sellers designates as early Iron II. Nos. 1, 2, 3, 4 and 7 have no exact parallels, but there is no reason to think that they are not, like the other vessels from Tomb J 3, to be considered Iron II. Special attention may be called to Nos. 7 and 9. Although different in shape, they are decorated with parallel horizontal black bands on body and neck. No. 9 has exact parallels from the tombs of Sahab, Meqabelein, and Amman; the writer has examined similar bottles, and photographs of them, in the Palestine Archaeological Museum, but their provenance is unknown. No. 11 has no exact parallels, although the features of the rim and handle resemble a jug from Hazor (Pl. LXII, 12) dated as 8th century.

The Iron II lamps (Pl. 79:3-7, 9-11) are similar to ones found at many sites, both west and east of the Jordan River. All of them bear the marks of carbon on the wick receptacle. There is no way of knowing whether they were used prior to their burial with the dead in Tomb J 3, or were lighted in the tomb as a part of a burial ritual. Many of the lamps are poorly fired; their porous condition may indicate that they were made especially for use with burials and were not intended for prolonged usage. Most of the lamps may, like those found elsewhere, be dated to the 9th and 8th centuries B. C. Nos. 3, 12 and 13, so-called high-footed lamps, resemble others in ware, mouth and rim, although the base may indicate that they are as late as the 7th or early 6th centuries B. C. (cf. *Naṣbeh II*, p. 115; *Tell Beit Mirsim I*, § 119, and *Tell Beit Mirsim III*, Pl. 69, B:1-11, and especially Albright's statement: "The evidence from T. B. M. agrees with that from Beth-shemesh and Megiddo to demonstrate a vogue for the high-footed lamp in the eighth century as well as in the sixth and fifth." p. 154). In view of the other pottery associated with such lamps, the use of the tomb during the Mesha period seems certain.

Although the buildings of the Iron II were unimportant and greatly denuded by later structures, this rather full publication of Iron II seemed to be merited in view of the fact that it is the first from a stratified site in Moab. As the writer was able to observe, during a later visit to Dhībân under the guidance of Dr. William H. Morton, who has excavated extensive Iron Age occupation levels in the north and central areas of the *tell*, an advance may be expected in the knowledge of Moabite pottery for this period when the results are published.

3. Roman-Nabataean Pottery

As in the other chronological periods at Dhībân, the pottery classified as Roman-Nabataean has affinities with the ceramic ware from other sites both east and west of the Jordan, especially from Petra, Khirbet et-Tannur, Amman, Herodian Jericho, Roman Samaria and Qumran. The assimilation of Nabataean and Roman culture makes it impossible to distinguish certain vessels as either Roman or Nabataean. Comparative studies of the pottery in the light of the evidence based on the dates of the coins makes it clear that the pottery extends from the 1st century B. C. to the early 4th century A. D.

The "egg-shell" ware of the Nabataeans was found in great abundance (Pls. 62B:1-16; 68:6-9). Thanks to the careful work of Hasan abu Awad, two complete bowls of this delicate painted ware were restored, and two others, more than half complete, were recovered. Although three patterns of painted decoration, i. e., "leaf" or "frond" motif, a crossed line pattern, and miscellaneous motifs including trefoil dots, ivy leaf, and parallel lines, were found, it is clear that the Nabataean artists exercised considerable freedom in the painted decoration of such bowls.[12] Unpainted bowls, also of a very thin ware, were found associated with the "egg-shell" specimens (Pl. 68:1-5). Some of the latter are certainly to be designated as Roman, especially the small bowls of a fine gray ware with plain inverted rim, in view of their presence at Herodian Jericho; their discovery at Qumran in a 1st century A. D. context may also be evidence for a Roman rather than a Nabataean designation (Catalogue description, Pl. 68:8). Although the painted pattern is identical in form on the two complete bowls, the one is a dark red design (Pl. 68:6) and the other is a black design (Pl. 68:8). The great quantities of such pottery bespeak a highly developed and vigorous commercial and artistic period of Nabataean culture; hence, a 1st century A. D. date is usually assigned this pottery, although

[12] Philip C. Hammond, Jr., *op. cit.*, p. 372; J. H. Iliffe, *Negeb I*, pp. 132-135.

it may have continued in use after 106 A. D. when the Nabataeans were defeated by Trajan.[13]

Similarly, the lamps may be described as Roman or Nabataean (Pl. 69:1-6). Attention may be called to D 3236 (Pl. 69:1), D 3179 (Pl. 69:3), and D 3231 (Pl. 69:5) which are well known and are commonly termed Herodian or Roman.[14] A slightly more elaborate type may be imported Roman (Pl. 69:2). One lamp, D 3228 (Pl. 69:6), may be distinctly Nabataean in view of its reddish ware and geometric design molded around the filler. It appears to be an eleven-pointed star interspersed with dots and surrounded by a rope design.[15]

A cooking pot of reddish ware, ribbed on body, is quite similar to such vessels found at Amman, Herodian Jericho and Petra (see Catalogue references, Pl. 69:9). Several types of pitchers were found (Pl. 69:8, 10-13), the most common being those of a reddish, well-fired clay with strap handle and rouletting on the upper part of the body (cf. also Pl. 70:1); they have also been found at Amman and Petra (see Catalogue references, Pl. 69:10).

A variety of juglets, bowls and dishes illustrate the Roman-Nabataean ware of the 1st and 2nd centuries A. D. (Pl. 70:1-22). The fine "sigillata" must be considered imported Roman (Pl. 70:14, 18, 19, 21, 22). Certain large jars, bowls and pitchers were recovered only in fragments and may be considered Roman-Nabataean, although some of the forms doubtless continued into the Byzantine period (Pl. 71:1-24).

4. Byzantine-Arab Pottery

As is well known, there is no sharp break in the pottery sequence between the Byzantine and early Arab periods. On the basis of comparative studies and the sequence of coins, the pottery seems to span the period from the 5th or 6th centuries to the 13th century A. D. Although most of the pottery must be considered early and medieval Arabic, some forms are Byzantine as judged by similar forms from Silet edh-Dhahr and Nebo. Arabic pottery has its parallels chiefly with that found the first season at Dhībân (1951), and at Abū Ghōsh, Mefjer, Beth-shan, Athlit, and Hazor.

Some of the jars and bowl rims such as Pls. 64:6; 65:5, 9-13 are doubtless to be classified as Byzantine, on the basis of ware, which is usually better fired than Arab ware, and ribbing. A number of sherds were found having a cream slip, and brown painted wavy line decoration (Pl. 67:7, 19); they are Byzantine, comparing favorably with specimens found at Nebo.[16] One fragmentary Byzantine lamp (Pl. 66:11) has a close parallel from Dhībân [1951], see Pl. 18:4, and is similar to ones found at Nebo and Silet edh-Dhahr (see Catalogue references), except that the latter have the "candle-stick" molding on the body directed toward the wick aperture.

Arab lamps (Pl. 66:3-6) are similar to those from Abū Ghōsh and Mefjer (Group 3 and 4) which date to the 12th and 13th centuries A. D. (see Catalogue references). One lamp, D 1738 (Pl. 66:7), bearing the design of vine and fruit on the body may be earlier but is similar to one from Abū Ghōsh.

Arab jar and bowl types of the 8th century A. D. and resembling Mefjer Ware 9, 10, 11, and 15 include D 1710 (Pl. 65:21), D 1720 (Pl. 67:1), D 2730 (Pl. 67:6, deeply incised "cut work"), and D 1701 (Pl. 67:17). However, most of the pottery belongs to the 12th and 13th centuries A. D. This includes pitchers such as D 2174 (Pl. 64:1), D 1932 (Pl. 64·2), and D 2588 (Pl. 64:10), as well as large jars such as D 3244 (Pl. 64:8), D 3241 (Pl. 64:9), and D 3002 (Pl. 64:4). Because of the almost infinite variety of geometrical painted patterns, no attempt has been made to classify them and only a few specimens have been published (Pls. 64:9-10; 67:3, 11, 14, 18); most of the ware is medium coarse, rather porous and poorly fired, but decorated in an attractive way with various shades of brown and red paint. As deVaux observed in connection with the pottery from Abū Ghōsh, there was an Arabic revival of a simple "ledge" handle (Pl. 67:4), and the development or use of an oblique strap handle (Pl. 67:20).

[13] Iliffe, *op. cit.*, p. 133; Nelson Glueck, *The Other Side of the Jordan* (1940), pp. 175-178, also Index; G. and A. Horsfield, *Petra II*, pp. 168 ff.

[14] Kelso, *Jericho I*, Pl. 14, 4; Pritchard, *Jericho II*, pp. 22-23; Sellers and Baramki, *Silet edh-Dhahr*, Fig. 33, 269.

[15] A similar type lamp of the Roman-Nabataean period at Ader was found by Albright and is described: "moulded design around small oil hole. The designs seem to have been an eight-pointed star, outside of which are two rope decorations." Cleveland, *Ader*, p. 96.

[16] Although precise dating within the Byzantine period is not possible, attention may be called to Schneider's dating of similar forms from Siyagha to the 6th and 7th centuries A. D.; cf. *Nebo II*, pp. 47, 65, 81, 96, 135.

CHAPTER VI

The Tombs

An Iron Age necropolis was located east of the *tell* about three hundred meters from the northeast corner of Area B, and is designated as Area J (Pl. 85). It was situated about halfway down the south slope of Wâdī Dhībân where the rock was found to be suitable for the cutting of tombs (Pl. 51:1). The writer wishes to express his appreciation to Dr. A. D. Tushingham for his careful supervision of the work in this area over a period of several weeks, and for his excellent records which facilitated the preparation of the following description of the area. It was estimated that approximately three hundred tons of earth were removed in the process of searching for the tombs.

The area was found to contain three tombs, a single grave, and the evidence of other burials in the vicinity. Tomb J 1, which was reported by one of the elderly inhabitants of Dhībân to have been found about forty years ago, had been cleared during the first campaign when a search for the Iron Age cemetery was conducted.[1] Plans were made of the tomb for comparison with other tombs of the same period. During a subsequent campaign, five additional Iron Age tombs were excavated in this area.[2] An inspection of Tomb J 1 showed that the native rock in which it was cut was formed of rock strata of varying degrees of hardness. The upper, a fairly hard and flinty type of limestone about 30 cm. thick, served as the roof of the tomb; the lower, about 2.00 m. in thickness, was a stratum of fairly soft *ḥúwar* stone which could have been rather easily excavated by the ancient tomb diggers.

Four soundings were made, the first of which was later extended as a part of Sounding 2; the latter, starting about 4 m. west of Tomb J 1, was extended to the west about 22 m. Sounding 4 started about 5 m. west of Sounding 2 and extended to the west a distance of 10 m. Sounding 3 was located east of Tomb J 1, beginning about 6 m. east of the entrance and extending a distance of 17 m. (Pl. 94).

Sounding 3 resulted in the discovery of a poorly preserved burial, designated as Grave 1, located about 10.45 m. east of Tomb J 1 and resting on the stratum of flinty rock which served as the roofs of the tombs to the west. A deposit of Iron Age pottery, bones and soft, dry, brown earth in a pit measuring 1 m. square by .85 m. deep was excavated. The fact that the grave was not lined and rested on the slope of the wâdī where considerable washing took place resulted in extensive damage and possible mixing of pottery from the terraced hillsides above. However, it appeared to be a shaft tomb; the number of bones and their sizes suggest more than one burial, but none of the bones were articulated. The pottery, except for some of the Iron II lamps, was broken. It was not possible to date the burial, although some of the sherds may be late Iron I (Pl. 78:5, 6, 12, 14, 15).

Sounding 2 included Tomb J 2, Tomb J 3, and a pit, containing pottery but no bones, located near the entrance to Tomb J 3. It is probable that the hillside was used for individual graves cut in the soil by the peoples who rebuilt Dhībân in the late Iron I period; not until the time of Mesha or his father were elaborate tombs used. This suggestion is supported by the Moabite pottery from the pit, which seems to be earlier than the lamps, etc. from the tombs (Pl. 77:14, 15).

Tomb J 2 was approached by a vertical shaft from the surface, about 2.50 m. deep and about 3.03 m. in diameter (Pl. 98). It was filled with *ḥúwar* chippings and dust compacted almost into a loose cement with some large stones and earth. The chamber itself was very irregular in shape, the roof had collapsed in places, and the floor showed no signs of having been worked. In the absence of pottery, it was not possible to propose a date for the tomb. There was no trace of benches such as existed in the other tombs. A probable explanation is that a shaft tomb was first constructed in Iron I or earlier, which was found and cleared in Iron II, when an attempt was made to quarry a tomb chamber such as those in Tombs J 1 and J 3. However, the rock formation made it difficult to leave the stratum of hard flinty rock as a roof, and the entrance was so large that it was impossible to

[1] *Dibon I*, p. 20.
[2] *Dibon II*, pp. 23-25.

fashion a practical doorway. Hence, the tomb was not used.

The best preserved of the tombs was J 3, although pieces of the ceiling had collapsed on the contents of the tomb, and there was evidence of their disturbance at some period after the final burial (Pl. 52:2). The tomb robbers left no objects that would identify them; only the reputation they gained from robbing tombs would suggest the Romans. The plan and sections of Tombs J 1 and J 3 (Pls. 95, 96) are similar except for three features: The steps at the doorway of J 1 have disappeared, the benches are of native rock rather than individual stone construction as in J 3, and the chamber is about 1 m. longer in J 3 than in J 1. The widths, 2.80 m., and the heights, 1.80 m., are the same.

The similar features of the tombs may be mentioned. They were oriented almost due north, the doors opening so as to face and parallel the Wâdī Dhībân at the base of the slope. Hard-packed earth formed a kind of porch at the bottom level of the doorway. One large flat stone served as a lintel to the doorway, above which was a well-constructed retaining wall; similar walls on either side of the doorway were necessary features to prevent the earth from washing down the hillside in front of the entrance. A number of stones were found outside the doorway, indicating that the entrance was closed by a temporary stone wall which could be easily removed before each burial. There is no evidence that any attempt was made to conceal the entrance; on the contrary, the presence of the retaining walls would suggest that no attempt was made at concealment.

Every effort was made to clear the tomb by levels, of which six were noted by slight differences in the color of the debris. However, it was evident that they had no chronological significance, in view of the fact that sherds from the same broken vessels were found scattered through the levels. A broken coffin lid was resting on the debris, and the human bones were broken and in a bad state of decay. Apparently the last persons to enter the tomb had not sealed it with stones; the soft earth in the doorway had not prevented some moisture from entering the tomb.

The benches on either side of the chamber and across the width of it, beginning about 4 m. from the doorway, were covered with debris in such a way that it could not be determined whether they were constructed as resting places for the dead or for the lamps, jars, etc. that were found mixed through the debris. Back of the bench and extending across the chamber was a slight depression which, with the south wall of the bench, formed a pit. The function of the latter could not be determined by its contents, but it could have served as a repository for bones that would obviously have to be cleared before each new burial. This was also a feature of Tomb J 1, although here the pit was cut in the floor and the bench was a part of the bedrock. In Tomb J 3, the benches were obviously built after the chamber was quarried, so there is a possibility that there was an earlier tomb which was later made to conform to a pattern which seems to have been current in the Iron II period.

Although the sizes differ, other tombs in east Jordan from Iron II possess some of the same features as the Dhībân tombs, notably, stairs leading into the main chamber and benches on the floor and against the walls. An Iron Age tomb at Meqabelein (dating about one century later than Tomb J 3), is described as a square chamber about 3 m. on each side having benches on three sides and a shallow gangway in the center.[3] Another, an Iron Age tomb from Sahab, approximately 7.50 m. square, contained a rock bench, about 30 cm. higher than the rest of the floor.[4] Two Iron Age tombs were also found at Amman, but the chambers are reported to have been quarried away in Byzantine times so that the plans could not be determined.[5]

Similar Iron Age tombs from Palestine have been found which had the features of steps leading into a main chamber and benches located on the floors and against the walls. Special attention may be called to Tomb 218 from Lachish[6] and to Tomb 5 from Tell en-Naṣbeh.[7] The latter differed from Tombs J 1 and J 3 in having benches, the surfaces of which were almost 1.50 m. above the floor, and a larger repository that appears almost like a smaller recessed chamber, but the tombs are alike in other respects. Although these similarities seemed to have been characteristic of both Moabite and Palestine tombs in the Iron II period, local customs and practical problems met by the tomb diggers in

[3] *Meqabelein*, p. 44.
[4] *Sahab*, p. 92.
[5] *Amman I*, p. 37.
[6] *Lachish III*, p. 204.
[7] *Naṣbeh I*, p. 84.

various types of rock formation combined to produce some distinctive features in each tomb.[8]

The tomb contained an unusual variety of pottery from the Iron Age and other objects which suggest that the burials were made at a period in Moabite history when a high degree of material prosperity had been achieved, and when the worship of Chemosh required careful attention to the burial of the dead. The different types of objects are illustrated on the following Pls. 58:1-22; 59:1, 5-13; 72:4; 77:1, 3-4, 7-11, 13; 79:1-13; 80:1-5, 7-9; 81:7, 21-22. Among these were included 44 lamps, 54 beads for necklaces, 17 bronze finger rings, 6 bronze pins, 2 pendants, 4 bronze bracelets, 3 bronze earrings, 1 gold earring, 3 iron finger rings, 6 iron fragments, 1 scarab (soapstone), 6 iron pins, 1 clay wheel from toy cart or chariot, 17 juglets or bottles, 1 sandstone disk, 1 jar, 1 bowl, 1 plate, and miscellaneous sherds. The carnelian beads were well executed (Pl. 80:3, 7, 8) as was also a horn-shaped pendant of heavy diorite which was highly polished and pierced through the small end (Pl. 81:7). The gold earring was of plain construction and was pointed on one end as if made for a pierced ear (Pl. 80:5). The scarab was very poorly made and could not be identified as to date (Pl. 80:9). No weapons were found in the tomb, although arrowheads and blades were found on the *tell*; it is probably to be considered a family tomb.

The date of the pottery suggests that the tomb may have been in use over a fairly long period, as early as the late 10th century B. C. (see Pls. 77:8; 79:1, 2, 8) and as late as the 7th century B. C. (Pl. 79:5, 12, 13). Although there is some question as to whether or not the high-footed lamp was used as early as the 9th century B. C. in Moab, it is probable that most of the burials were made during that century which was the age of King Mesha.[9] All the lamps bore traces of carbon on the pinched rim where the wick had been placed. All except six of the lamps were of the same light buff ware, porous and poorly fired, as if they were made in haste and for use with burials—not being intended for prolonged usage—since the oil would be absorbed into the walls of the lamps.

The bones were in such a condition of decay and disarticulation that it was not possible to determine the position of the bodies at the time of burial or the number of skeletons present. However, all the teeth were saved and were brought to the United States for examination.[10] On the basis of the number of upper central incisors, it is thought that at least 45 adults were buried in the tomb. The fact that there were considerably fewer upper bicuspids, upper and lower molars, and lower incisors than would be expected for 45 skeletons may be explained as the result of pyorrhea. No cavities were observed; it is often true today that persons whose teeth have no cavities will have a gum condition such as pyorrhea. Approximately one-third of the upper molars are not calcified; this suggests that one-third of the burials may have been persons under 21 years of age. This is supported by the fact that a number of the wisdom teeth were in the first year of calcification, indicating an age of about 16 years. The lower cuspids suggest one child of 14 years; the lower bicuspids, one child of no more than 10 years; the lower molars, two children of 5 years and three children of 12 years. Only two of all the teeth had tartar, which goes with pyorrhea, but this may have disappeared after burial. A study of the deciduous teeth suggests that at least eight children 5 years or younger were buried in the tomb. The small size of some of the finger rings and the presence of the clay wheel of a toy cart or chariot would suggest that it was a practice to bury with children, as with adults, certain possessions which had been theirs while living.

The clay coffin was empty; its position on the floor plus the fact that there was no debris covering it suggest that previous burials had been cleared away and that this was for use in the final burial (Pls. 53:2; 95, 96). The lid was broken and pieces were lying on the debris nearby. The coffin measures 2.00 m. in length and has a maximum width of about .40 m. It is made of clay; the box is of rather heavy construction, buff-gray in color, with the bottom edges left unfinished and the top rim rounded in shape. Although the lid was rather coarse and porous on the surface, in section it appears to have been well-fired. All the pieces of the lid were found and later restored in the Amman Museum. The design on the top of the lid identifies the sarcophagus as an anthropoid coffin,

[8] Cf. Kurt Galling, *Biblisches Reallexikon: Handbuch zum alten Testament*, I (1937), Tübingen, Col. 243-248; A. G. Barrois, *Manuel d'Archéologie Biblique*, Tomb II (Paris, 1953), pp. 295-298.

[9] This date would be in accord with one proposed for the tombs found in 1953; cf. *Dibon II*, p. 24.

[10] The writer wishes to express appreciation to Dr. Quentin Barber of Fort Worth, Texas for his analysis of the teeth.

the first to be found that can be attributed to the ancient Moabites of the period of King Mesha. Unlike similar coffins found in Palestine, the lid was of one piece so that the head portion could not be moved separately (Pl. 53:1), nor was there a representation of the arms.[11] The following features of the face, all molded prior to firing, can be observed: the eyes, nose and nostrils, mouth, dimple, possibly the representation of a beard and hairline, and ears, the right one being higher than the left, but both serving as handles for the lid.

Although an anthropoid coffin from Beth-shan is dated to the 12th-10th centuries B. C.,[12] and an Ammonite specimen from Sahab is 10th century,[13] the contents of Tomb J 3 suggest a 9th century date. Because of the well-known reputation of Mesha as a military leader and builder, it is tempting to associate the coffin with his dynasty, although absolute proof is lacking. A tradition associating the use of a coffin (*'ārôn*) and embalming in connection with the burial of Joseph (Gen. 50:26) suggests that a similar practice prevailed among the ancient Moabites.

[11] Cf. Galling, *op. cit.*, col. 449-451; Barrois, *op. cit.*, pp. 293-295.

[12] James B. Pritchard, *The Ancient Near East in Pictures Relating to the Old Testament* (Princeton, 1954), No. 641, p. 326.

[13] William F. Albright, *AJA*, XXXVI (1932), p. 296; cf. Gerald Lankester Harding, *Sahab*, p. 92.

CHAPTER VII

The Coins

Thirty coins were found ranging in date from 27 B.C. to A.D. 1238. After preliminary study at Dhībân, and at the Department of Antiquities, permission was granted to bring the coins to the United States where cleaning and further study could be undertaken. Because of the worn and/or corroded condition of the coins, it was felt that the cleaning should be done only by well-trained technicians working under laboratory conditions. The writer wishes to express his appreciation to The American Numismatic Society, and to Chief Curator George C. Miles, for the cleaning and identification of the coins.

Of the thirty coins, fifteen were in such condition after cleaning that they could be photographed (see Pl. 82). Of the remaining coins, six were judged to be unidentifiable. The other coins, nine in number, which could not be photographed satisfactorily, are described below:

1 DO 112. Roman. Augustus (27 B.C.–A.D. 14) ??. Local mint. A, I, NW. corner, 1.50 m. below surface.

2 DO 143. Roman. 4th century A.D. A, I, W. face.

3 DO 183. Roman. Hadrian (A.D. 117-138). Arabia, Petra. Overstruck? B, III, central area.

4 DO 184. Roman. 4th century A.D.? E, I, surface debris.

5 DO 195. Roman. 4th century A.D. E, I, 1.50 m. S. of wall 12.

6 DO 187. Byzantine. Early Byzantine, Anastasius or Justin I. A, II, W. side.

7 DO 158. Byzantine. Constans II?. (A.D. 641-668). B, II, Bldg. A, floor 1.

8 DO 161. Arab. Umayyad fals. Mint and date, if any, effaced. *Ca.* 110 A.H. = A.D. 728-29. B, II, Bldg. A, between floors 1 and 2.

9 DO 110. Arab. Ayyūbid fals. Mint, date, and ruler's name effaced. *Ca.* 600 A.H. = A.D. 1203-04. B, I, Bldg. A, from dismantling pilaster between rooms 1 and 2.

Because the coins were found scattered through the debris of the various strata, and not in hoards, they have been used with caution in dating the structures and strata. Approximately nine coins, all of them from the Roman period, must be considered intrusive; these were in the Arab and Byzantine strata, and are doubtless to be explained by the extensive shifting of debris which took place in those periods to level the ruins for buildings and floors under construction.

Chronologically the coins are distributed as follows:

10 — Roman	5 — Byzantine
1 — Nabataean	7 — Arab
1 — Jews under Nero	6 — Unidentifiable

By areas excavated, the coins are distributed as follows:

6 — Area A	2 — Area E
14 — Area B	1 — Location uncertain
7 — Area C	

Although it has not been possible to determine the mints in all cases, where this has been possible it indicates far-flung commercial relationships on the part of the people of Dhībân. The following mints have been identified among the coins attributed: Tripolis in Phoenicia, Antioch, Constantinople, Petra and Medeba in Transjordan, Cairo and Damascus. The absence of Greek and Maccabaean coins is of interest in view of the fact that there is also a gap in the pottery sequence and stratification for these periods.

The Roman coins range in date from 27 B.C. to A.D. 337 and include coins of Augustus, Nero, Domitian, Hadrian, Elagabalus, Diocletian, Constantine I, and Julia Domna, wife of Septimius Severus. The latter, which was minted at Petra, may be considered with the Severus' inscription (see Pl. 83:2 and Pl. 82:5) as evidence of the Roman occupation of Dhībân during the peaceful reign of Septimius Severus (A.D. 193-211). Although the mint is lacking, the coin attributed to the Jews under Nero, year 5 of his reign (see Pl.

82:1) may be considered as evidence for commercial contacts between Dhībân and western Palestine in the first century A. D.

The Nabataean coin of Rabbel II (A. D. 71-106) may have significance at two points. It was found associated with the egg-shell pottery which appeared in great quantities in Areas B, D and E. Furthermore, it was found among the stones of the steps leading into the city and representing the "Nabataean" gateway, as indicated also by the pottery found on the steps and by the orientation of the steps with the great Nabataean wall marked by the typical diagonal stone dressing of the Nabataeans. The coin was found by Mr. Gerald Lankester Harding and the writer while they were examining the "gateway" area following the close of the excavation.

The presence of late Byzantine and early Arab coins in Bldg. A, between floors 1 and 2, indicate that the Arabs made use of Byzantine structures in their building program, but destroyed, in the process, any Byzantine building which may have been in Areas B and C. The Byzantine coins ranging in date from A. D. 518 to 668 suggest that Dhībân was occupied during this period; this is confirmed by an analysis of the pottery, although there remain some questions as to the absolute dating of such pottery.

The Arab coins have significance in that they parallel the two periods of Arab pottery that were observed. The Umayyad and 'Abbāsid coins cover the period from A. D. 718 to 815. There is no doubt that this was a time of considerable building at Dhībân, as illustrated both by the extent of the early phase of Building A, and the pottery from this period, which has many affinities with the ware of Mefjer and Abū Ghōsh, dating to the same period.

The second and final phase of Arab building, as indicated by the Ayyūbid coins, ranging in date from A. D. 1196 to 1238, by the size of Building A, and by the quantities of pottery having affinities with that from Abū Ghōsh, Athlit, and Mefjer during the 12th and 13th centuries A. D., was made possible by the defeat of the Latin Kingdom following the battle of Hattin in A. D. 1187. It is reasonable to conclude that the buildings constructed at Dhībân in this period were a part of a revival of commerce and art to which also belong the erection of the castle at 'Ajlun, the large tower at Kerak, and other buildings in territory once held by the Moabites.[1] Following this period, the site was abandoned. Although the south "citadel," as it has been called, where the modern village of Dhībân is located, has not been excavated, it seems probable that this became the location of the city in the 14th and 15th centuries A. D.

[1] C. C. McCown, *The Ladder of Progress in Palestine* (1943), pp. 338-339.

CHAPTER VIII

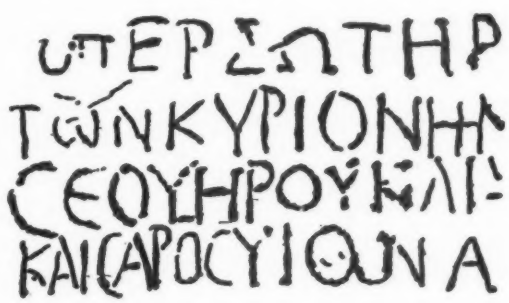
The Inscriptions

Two fragmentary Greek inscriptions were found and one glass seal containing nine Arabic letters.

No. 1 (DS 52; Pl. 83:2)

The inscribed stone was found in Area B at the southeast corner in the debris of the surface level suggesting that it may have been reused, as were earlier capitals, drums, and bases from a Roman edifice, in the construction of the Arab building. The dimensions: height—42 cm.; length—58 cm.; thickness at bottom—44 cm.; thickness at top right —20 cm. The stone is badly weathered at the upper left-hand corner. Traces of a single line frame at the bottom and at the left suggest that originally an incised line formed a border on all four sides. The four lines of the inscription are incomplete on the right, the letters at the end of each line being incomplete as if the block had been cut after the letters were inscribed. It is also possible that the stone was originally part of a wall, that the inscription was cut after the wall was constructed, and that the inscription ran over or across the vertical joints between two or more blocks. The inscription was delivered to the Department of Antiquities and is stored at the Amman Museum.

The following transcription was produced by inking in the lines of a photograph of the inscription and then dissolving the image:



Some of the letters are well executed, but others are badly eroded; there seems to have been no attempt at erasure as was sometimes the case with Severan inscriptions.[1] It was not possible to determine the original shape of the block, whether free-standing or a feature of a building, although it has been suggested that it was a lintel block originally associated with the large Roman building, traces of which were found at Dhībân in 1953.[2]

The following proposed reading contains a minor reconstruction of the text on the basis of similar inscriptions mentioning Septimius Severus:

ʽUPER SŌTĒRI [AS] .
TŌN KURION . . . .
SEOUĒROU KAI . . .
KAISAROS UIŌN A . .

The opening phrase in the first line is a common one used in connection with Roman Emperors who were considered to be benefactors of certain cities such as Antioch, Gerasa, etc.; it continued to be used in Byzantine church Mosaics which contain inscriptions offering prayers for the salvation and health of generous donors.[3] The term, "the Lord" (TŌN KURION) is a common epithet; it was doubtless followed by other titles and by the name SEPTIMIOU.[4] The spelling of the name SEVERUS is also quite common and may have been followed by the name of his illustrious wife, Julia Domna, one of whose coins was found in the excavation (Pl. 82:5). The designation of Severus as CAESAR and the reference to his sons (UIŌN) must have been followed by their names, GETA AND CARACALLA. In this connection, mention may be made of a Nabataean inscription in Aramaic from Wâdī Mukatteb which refers to the

[1] A. G. Woodhead, *The Study of Greek Inscriptions* (Cambridge, 1959), p. 9.

[2] *Dibon II*, p. 15.

[3] *Gerasa*, No. 14, p. 381; No. 15, p. 382; No. 58, pp. 401 f.; No. 131, p. 421, etc.; *Nebo I*, Part I. The Text, p. 264 and Pl. 118, 2.

[4] R. E. Brünnow and A. V. Domaszewski, *Die Provincia Arabia* (Strassburg, 1904), Vol. 3, pp. 322 f.; cf. two Greek inscriptions, one from Zebîre and one from Ḥarran; both have the same opening phrase as the Dhībân inscription, identical spelling of the name Severus and similar titles; one mentions both Geta and Julia Domna, but neither contains the name Caracalla.

year of "the three Caesars" (*TLTT QISRIN*). Cooke's comment may suggest a probable date for the Dhībân inscription: "The 106th year of the Era of Bostra = A. D. 210-211. During this year the Emperor Septimius Severus died (Feb. 4, 211), and both his sons, Caracalla and Geta, become joint emperors; the year, therefore, was remarkable for having witnessed three Caesars on the throne."[5]

There is no record that Severus paid a royal visit to Dhībân, although following the year A. D. 198, which he spent in Mesopotamia, he inspired extensive building in the province of Asia and encouraged road construction in Syria.[6] A Roman milestone, legend completely defaced, may still be seen about one-half mile south of Dhībân near the course of the ancient Roman road, which was also the Moabite King's Highway.

No. 2 (DS 56; Pl. 83:1)

The inscribed stone was brought to the camp by Muhamet Hamdan, a resident of Dhībân and one of the excavation laborers. He reported that it had been found several years earlier east of the highway where other similar ones had been discovered near the tombs. Other visitors, including Father Sylvester J. Saller, reported the existence of Byzantine tombs east of the Dhībân highway. The stone is crudely chiseled; its surface is smooth only on the inscribed side. The dimensions: Maximum height —56 cm.; maximum width—27 cm.; maximum thickness—9 cm. The stone was delivered to the Department of Antiquities where it was stored in the Amman Museum.

None of the words of the Greek text is complete and the symbol at the top cannot be identified, either because of erosion or because the stone was broken at the top; some of the letters on either side may also be missing. The following transcription was produced by inking in the lines of a photograph of the inscription and then dissolving the image:

The following letters may be identified with some degree of certainty: PIĒL . . . LAMP . . . LEISE . . . TŌN L . . . The letters in the second line may be an abbreviated or fragmentary form of the word LAMPROTATOU meaning "illustrious" or "brilliant." It appears in an honorary bilingual inscription from Palmyra, Greek and Aramaic,[7] in several inscriptions from Gerasa,[8] and from Mt. Nebo.[9] The letters on the third line may be a part of the name of the deceased, or a form of the word ELEOS, "mercy."

No. 3 (DO 154; Pl. 80:6)

This glass seal, made with an inscribed die which was pressed on the glass in its molten state, was found in Stratum I of Area A at the west side. The edge is nicely rounded making a circular face about 2 cm. in diameter. Although the shape on the inscribed surface is similar to several Arabic glass weights of the Fatimid period in the Palestine Archaeological Museum, for example, PAM No. 40. 184, it is likely that the Dhībân seal served some other purpose.[10] As the broken edges on the back suggest, it was attached to a larger piece of glass. It is dark blue in color. The piece was acquired by the Department of Antiquities and placed in the Amman Museum.

As the following free-hand drawing, based on the reading of several members of the expedition

[5] G. A. Cooke, *A Text-Book of North-Semitic Inscriptions* (Oxford, 1903), p. 262.

[6] Cf. David Magie, *Roman Rule in Asia Minor to the End of the Third Century After Christ*, Vol. I (Princeton, 1950), pp. 671-673; before the end of A. D. 199, Severus visited Egypt, returning to Antioch at the end of the year; in Antioch on January 1, A. D. 202, he assumed his third consulship with Caracalla as his colleague.

[7] G. A. Cooke, *op. cit.*, p. 285.

[8] *Gerasa*, No. 273, p. 467; No. 279, p. 471.

[9] *Nebo I*, Part 1. The Text. p. 259; cf. an inscription from the church at Suhmata, *QDAP*, III (1934), p. 99.

[10] The writer wishes to express appreciation to Mr. Yusef Saad, Secretary of the Palestine Archaeological Museum, for granting permission to examine the Museum's collection of Arabic glass seals, and for preparing photographs of several pieces.

staff, suggests, there are nine Arabic letters arranged in three lines:

Both the translation and the date are uncertain, although the pottery associated with it would suggest the latter phase of the Arab building, *ca.* 12th-13th centuries A. D.[11]

[11] Cf. *Nebo I*, Part 1. The Text. p. 276.

CHAPTER IX

Summary and Conclusions

Although the results of the excavations conducted in the Spring of 1952 are not to be interpreted as providing an archaeological picture of the history of the entire site, since the work was concentrated at the southeast corner and in the tombs, several important conclusions have been reached:

1. There is no valid reason for doubting the traditional identification of Dhībân with the Dibon of the Omri-Ahab-Mesha period, *ca.* 850 B. C. The evidence of an extensive Iron II occupation in Stratum IV of Areas B and C, and of pottery from the Iron Age necropolis enhances the identification of Dhībân with Dibon, Mesha's capital. The literary evidence is still confined to the Mesha stele, but the fact that the stele was discovered at Dhībân, now considered in the light of the archaeological remains, strongly suggests that it originally stood at Dhībân, rather than at some other site in Moab. No other site in northern Moab fits so well the Old Testament references and Mesha's allusions to Dibon as the large and important *tell* of Dhībân.

2. It has been demonstrated that Dhībân was an important city during the medieval and early Arab, the Byzantine, the Roman-Nabataean and the Iron II Periods. House remains for the Arab and Iron II occupations were found, and also a complex of walls and pavements associated with the city entrance way during the other periods. Because of the restricted area of the excavations, caution must be used in drawing conclusions concerning the absence of strata that could be associated with the Maccabean, Hellenistic, Persian, and Late or Middle Bronze periods. It is, of course, possible that occupational levels for these periods will be found elsewhere on the *tell* in subsequent excavations, which, it is to be hoped, will be conducted in the future. However, the history of Dhībân has been clarified for the periods from the 10th to the 6th centuries B. C., and the 1st to the 13th centuries A. D. Although no stratified remains datable to the Early Bronze periods were found, the presence of some Early Bronze sherds suggest that a settlement must have existed elsewhere on the *tell* during the 3rd millennium B. C. The absence of both buildings and pottery that can be assigned to the Middle and Late Bronze periods is in accord with Glueck's conclusion, based on surface exploration, that there is a gap in sedentary occupation in Moab from the 20th to the 13th centuries B. C.

3. The suspicion of early visitors to Dhībân that a "Southeast Gateway" existed near the "saddle" leading to the south *tell* must now be qualified. In the absence of door sockets, guardrooms, and similar features of ancient city gateways, it is now clear that the area is to be considered an open entrance way. This is best preserved in the Nabataean period in which there was constructed a stone ramp leading to an elevated series of paved steps and landings about 8 m. in width. Any defense of the area would have depended on the elevation of the ramp, towers, and possibly temporary stone walls erected across the entrance way at the approach of an enemy who would be visible some distance away on the plain or tableland (cf. Josh. 13:9). Although the frequent rebuilding at the southeast corner has made it difficult to date with certainty the walls of the Iron II, Byzantine, and Arab periods below and above the Nabataean entrance way, it is probable that access to the city at the southeast corner remained the same in all periods of its occupation. A sounding in the present earth ramp at the east side of the *tell* strengthens the view, which has long been held, that one of the main gateways must have existed at the east of the city; others will doubtless be discovered at the north and west sides.

4. The two features of a water conservation program at Dibon proposed by King Mesha, namely, reservoirs and cisterns, have been amply illustrated by the excavations and surface explorations on and near the site. One hundred cisterns catalogued, the presence of a large reservoir east of the *tell*, traces of an aqueduct in the Roman-Nabataean period, and conduits for carrying rainwater from the floor levels of structures of each occupation period suggest that the art of water conservation was developed to a high degree at Dhībân. Such archaeological remains provide rather strong evi-

dence for the view that Moab has not experienced any major change in climate or amount of annual rainfall, at least, since the 10th century B. C., and that the ancient Moabites, like the modern residents of the area, were forced to conserve water with care.

5. Dhībân's significance, not only as a military and commercial city serving caravans which used the King's Highway passing east of the *tell*, but also as an agricultural center has been well illustrated. The discovery of grain, probably a wheat relative, found in Stratum IV and dated by both the carbon-14 test and the pottery associated with it to *ca.* 850 B. C., shows that the ancient Moabites gave much attention to the cultivation of grain. Ovens and storage jars for the grain were manufactured as early as the 9th century B. C. Although the terracing of the hillsides near the city may be Byzantine, it is probable that the cultivation of grain in the plains near Dhībân was an important vocation of the people, and a source of considerable revenue as they provided food for the passing caravans.

6. Our knowledge of Moabite pottery has been considerably enhanced by a study of the types found during the excavations, although much work remains to be done before the dating can be as certain as it is with Palestinian types. The analysis of Dhībân pottery tends to confirm the principle that Moabite pottery that is similar in shape, decoration, and texture to Palestinian pottery is to be dated to the same periods. This is obviously true for the lamps from each period of Dhībân's history, although there was also a close similarity in other forms, not only for Iron II, but also for the Roman-Nabataean, Byzantine, and Arab periods. A degree of cultural unity between Moab and Palestine, implied in the Mesha stele and the Old Testament texts, is well illustrated in the pottery. However, some Iron II bowls, juglets, and jars have their closest parallels with Ammonite and Edomite forms, especially those found in Amman, Sahab, and Meqabelein. With reference to Iron I forms, the picture is less clear because of the scarcity of complete vessels and sherds, but there is no reason to doubt that Iron I pottery follows the same chronological pattern in Moab as in Palestine. As for Roman-Nabataean, Byzantine, and Arab pottery, it was not possible to detect distinctive Moabite forms; the materials parallel closely those from Mefjer, Abū Ghōsh, Athlit, Beth-shan, and Hazor in the Arab periods, from Mt. Nebo and Silet edh-Dhahr in the Byzantine period, and from Petra, Khirbet et-Tannur, Amman, Herodian Jericho, Roman Samaria, and Qumran in th Roman-Nabataean period.

7. The coins and the Severus inscription follow the chronological pattern of the pottery for the Roman-Nabataean, Byzantine, and Arab periods. A coin of Julia Domna, wife of Septimius Severus, may be considered with the inscription as evidence for an important Roman occupation of Dhībân during the peaceful reign of Severus (A. D. 193-211). The coins of Augustus, Nero, Domitian, Hadrian, Elagabalus, Diocletian, and Constantine I, and their mints of Tripolis in Phoenicia, Antioch, Constantinople, Petra, and Medeba in Transjordan, Cairo and Damascus are indicative of the commercial relationships of Dhībân in the Roman period and later. The Byzantine coins ranging in date from A. D. 518 to 668 conform to the date of the pottery, although the flagstone pavement in Area B was all that remained of the buildings in this period. The Arab coins parallel the two periods of Arab pottery, suggesting an early phase of building in the late 7th, 8th and early 9th centuries A. D. and a later phase in the 12th and 13th centuries A. D.

8. Some features of the burial customs of the Moabites during the Iron II period are well illustrated by the discovery of the necropolis east of the *tell*. The skillful quarrying of the limestone chambers, the construction of benches and repositories, doorways, exterior retaining walls, and steps leading into the chambers suggest that proper burial of the dead was an important consideration to the 9th century B. C. Moabites. The contents of the tomb, including an anthropoid coffin, bracelets, finger rings, earrings, beads, pendants, and a variety of ceramic vessels, including 44 lamps, suggest that the tombs were used at a period when a high degree of material prosperity had been achieved, and when the worship of Chemosh required careful attention to the burial of the dead. Evidence of food offerings buried with the dead, such as was found at Jericho (Tell es-Sultan) in tombs from an earlier period, was not found in the Dhībân tombs, doubtless because their reuse had permitted decay to take place, but the types of vessels suggest that it may have been a practice among the Moabites to bury gifts of food, oil, and perfume with the dead. Although it is not possible to date with certainty the earliest and latest use of the necropolis, due to scarcity of Moabite materials

from Iron I and from the 6th century B. C., most of the objects in the best preserved of the tombs indicate a 9th century B. C. date, that is the period of Omri-Ahab-Mesha.

Catalogue of Pottery and Miscellaneous Objects

Introduction

The catalogue follows the arrangements of Plates 53-83 according to this grouping:

1. Photographs of coffin and coffin lid (Plate 53).
2. Photographs of pottery vessels and grain (Plates 54-59).
3. Photographs of pottery fragments (plates 60-63).
4. Drawings of pottery (Plates 64-79).
5. Photographs of small objects (Plates 80-81).
6. Photographs of coins (Plate 82).
7. Photographs of inscriptions (Plate 83).

In each of the sections 2, 3, and 4 above, the Plates are arranged so the materials represented in the photographs and drawings are grouped by type and date, beginning with Medieval Arabic and continuing through Byzantine, Roman-Nabataean, and Iron Age periods.

The procedure in describing each artifact in the catalogue is as follows. If an object has been both photographed and drawn, the first number is a cross reference to the photograph or the drawing. Descriptions are reported in connection with all the drawings; if a description is given with a photograph this indicates that the object was not drawn.

If there is a cross reference to another Plate, and also a description of the object, the second number is the serial number of the object as recorded in the Field Registers. These numbers are prefixed by the letters D, DO or DT, indicating respectively one of the three Field registers: D, Dhībân pottery; DO, Dhībân Objects; or DT, Dhībân Tomb objects.

There follows a description of the artifact indicating type, color, ware, decoration, and other available information. In most instances, it has been possible to check—and revise where necessary —the descriptions contained in the Field Registers, which were prepared under the usual, unfavorable conditions existing while an excavation is in progress. There follows, where available and relevant, a listing of references to comparative materials (see list of Abbreviations). Usually the references listed contain additional citations of illustrations of similar materials from other excavations. Such references are followed by the date of the artifact, if it has been possible to determine one. Concluding each description is a designation of the provenance indicating the excavation Area (A, B, C, D, E, or numbered tombs, see Plates 86-95 for locations of Areas), the Stratum, and the Location within each Area (see Chapter I for a discussion of the method employed in numbering the Strata within each Area).

Where it was possible to do so, each object has been located with reference to certain walls and rooms. Since it was not practical to include all the numbers of such walls and rooms on the surveyor's plans, their locations in the various Area plans are listed below:

WALLS

Area A

(See Pl. 89)
No. 1 — uppermost wall at N. (left).
No. 2 — next lower wall.
No. 3 — large Nabataean wall.
No. 4 — lowest wall, on bedrock at S. (right).

Areas B and C

(See Pl. 86)
No. 1 — N. wall of Bldg. A.
No. 3 — S. wall of Bldg. A.
No. 2 and Nos. 4-7 — Piers and N.-S. walls of Bldg. A.

Areas B and E

(See Pl. 87)
No. 10 — E.-W. wall at center of Area B.
No. 7—single course wall S. of No. 10.
No. 11 — E.-W. wall at N. of Area E.
Nos. 9-14 — complex of Nabataean steps and landings, SW. corner of Area B and NW. corner of Area E.

Area C

(See Pl. 87)
No. 10 — wall running diagonally through cen-

ter of Area C and connecting with No. 10 of Area B.

No. 12 — Thick wall at S. end of Area C and N. end of Area D.

AREA B

(See Pl. 88)

No. 22 — Mud-brick wall at N. of Area.

No. 20 — Stone wall S. of No. 22 and parallel to it.

No. 21 — Stone wall joining Nos. 20 and 22.

Nos. 23-25 — Walls surrounding bin at E. side of Area.

AREA C

(See Pl. 88)

No. 30 — Wall S. of oven.

No. 31 — Wall S. of No. 30.

ROOMS

AREAS B and C

(See Pl. 86)

Nos. 1-7 — The only numbered rooms are those between Walls 1 and 3 of Bldg. A. Rooms are numbered beginning with No. 1 at E., the space set off by piers being designated as rooms.

1. Plate 53: Photographs of Coffin and Coffin Lid

1. 97. DO 194. Upper portion of coffin lid; coarse terra cotta; design of human face representing the eyes, nose, mouth and ears; remaining fragments of lid were found and later restored in the Amman Museum. Anthropoid coffins have been found at Beth-shan and elsewhere in Palestine; their ware and decoration are more highly developed than that of the Moabite coffin. Iron II. Tomb J3.
2. 97. DO 194. Terra cotta coffin *in situ* on floor; description same as for Pl. 53:1.

2. Plates 54-59: Photographs of Pottery Vessels and Grain

Plate 54

1. 64:10
2. 64:2
3. 64:1

Plate 55

1. 68:6
2. 68:8
3. 68:9
4. 68:7

Plate 56

1. 69:8
2. 69:10
3. 69:12
4. 69:13
5. 69:9
6. 69:6
7. 69:3
8. 68:5
9. 68:3
10. 68:1

Plate 57

1. 72:1
2. 72:2
3. DO 221. Carbonized grain, a wheat relative, either wheat or barley. Iron II. C, IV, between walls 30 and 31.

Plate 58

1. DT 76. Lamp. Buff, carbon deposit, pinched lip, flaring rim, flat base, slightly concave. Cf. *Naşbeh II*, No. 1628; *Samaria I*, Fig. 11, 37; Fig. 27, 2; *Tell Beit Mirsim III*, Pl. 15, 6; *Lachish III*, Pl. 83, 147; *Megiddo I*, Pl. 37, 10. Iron II. Tomb J3.
2. DT 79. Lamp. Buff, carbon deposit, pinched lip, flaring rim, flat base, slightly concave. Cf. 58:1. Iron II. Tomb J3.
3. DT 78. Lamp. Description and comparative references. Cf. 58:1. Iron II. Tomb J3.
4. DT 77. Lamp. Pinkish, grits, carbon deposit, pinched lip, flaring rim, flat base, slightly concave. Cf. 58:1. Iron II. Tomb J3.
5. 79:7
6. 79:3
7. DT 82. Lamp. Cream, carbon deposit, pinched lip, flaring rim, disk base. Cf. 58:1. Iron II. Tomb J3.
8. 79:6
9. 79:4
10. 79:8
11. DT 124. Lamp. Reddish, grits, carbon deposit, pinched lip, flaring rim, flat base. Cf. 58:1. Iron II. Tomb J3.
12. DT 130. Lamp. Buff, small grits, carbon deposit, pinched lip, flaring rim, flat base which is slightly concave. Cf. 58:1. Iron II. Tomb J3.
13. DT 149. Lamp. Buff, poorly fired, grits, carbon deposit, pinched lip, flaring rim, base slightly indented. Cf. 58:1. Iron II. Tomb J3.
14. DT 147. Lamp. Buff, poorly fired, carbon deposit, grits, pinched lip, flaring rim, flat base which is slightly indented. Cf. 58:13. Iron II. Tomb J3.
15. DT 132. Lamp. Cream, carbon deposit, pinched lip, flaring rim, thick disk base. Cf. *Beth-zur I*, Pl. IX, 14; *Naşbeh II*, Nos. 1628 ff.; *Tell Beit Mirsim III*, Pl. 15, 8-9; *Samaria I*, Fig. 27, 4; *Dibon II*, Fig. 10; *Lachish III*, Pl. 83, 152; *Megiddo I*, 37, 7. Iron II. Tomb J3.

16. DT 135. Lamp. Reddish, grits, carbon deposit, pinched lip, flaring rim, disk base. Cf. 58:15. Iron II. Tomb J3.
17. DT 137. Lamp. Dark cream, small grits, carbon deposit, pinched lip, flaring rim, shallow disk base. Cf. 58:15. Iron II. Tomb J3.
18. DT 129. Lamp. Cream, large grits, carbon deposit, pinched lip, flaring rim, shallow disk base. Cf. 58:17. Iron II. Tomb J3.
19. DT 119. Lamp. Dark cream, small grits, carbon deposit, pinched lip, flaring rim, disk base. Cf. 58:15. Iron II. Tomb J3.
20. DT 123. Lamp. Reddish, grits, carbon deposit, pinched lip, flaring rim, disk base. Cf. 58:16. Iron II. Tomb J3.
21. DT 148. Lamp. Cream, small grits, carbon deposit, pinched lip, flaring rim, shallow disk base. Cf. 58:18. Iron II. Tomb J3.
22. DT 164. Lamp. Buff, small grits, carbon deposit, pinched lip, flaring rim, disk base slightly concave. Cf. 58:13. Iron II. Tomb J3.

Plate 59

1. 77:11
2. 72:3
3. 69:11
4. 77:15
5. 79:2
6. 79:1
7. 77:10
8. 77:8
9. 78:7
10. 77:3
11. 77:13
12. 77:7
13. 77:9

3. Plates 60-63: Photographs of Pottery Fragments

Plate 60

1. D 2088. Base. Reddish surface, gray core, flat bottom with concentric grooves. Arab-Byz. B, I, N. of Wall 1.
2. D 2047. Handle. Buff, gray core, dark-red paint in geometric design. Cf. *Athlit*, Pl. XXVII. Arab. B, I, N. of Wall 1.
3. D 2020. Base. Buff slip, gray core, poorly fired, hand-made. Arab. B, I, N. of Wall 1.
4. D 2018. Base. Pinkish ware, white slip inside and out, well-baked, flat base thinner than flaring walls. Arab. B, I, N. of Wall 1.
5. D 2019. Base. Pinkish heavy ware, gray core, white slip inside and out, concave base, imprint of cloth on inside of base. Arab. B, I, N. of Wall 1.
6. D 2017. Body. Pinkish ware, gray core, hand-made, thumb-indented "rope" design adjacent to strap handle. Arab. B, I, N. of Wall 1.
7. D 2166. Rim. Pinkish, medium fine ware, plain rim. B, I, interior Bldg. A.
8. D 2048. Handle. Pinkish ware, cream slip, gray core, poorly fired, horizontal handle. B, I, N. of Wall 1.
9. D 2165. Handle. Pinkish, plain strap handle. B, I, interior Bldg. A.
10. D 2129. Body, large jar. Pinkish ware, cream slip, gray core, heavy, wavy line incised outside. C, I, NW. corner.
11. D 2124. Handle. Gray ware, coarse, strap handle of jar. C, I, NW. corner.
12. D 2228. Handle. Gray, handle with two grooves on each side of top, attached to plain rim. C, I, Room 8.
13. D 2220. Ring base. Reddish ware, gray core, red and yellow glaze inside. Cf. *Mefjer*, Fig. 11, 7; Pl. XVI, 12; *Athlit*, Pl. XXVIII; *Abū Ghōsh II*, Fig. 32, 8. Arab. C, I, Room 5.
14. D 2123. Rim. Pinkish slip, coarse ware, grits, plain out-turned rim (photographed upside-down). C, I, NW. corner.
15. D 2267. Rim. Cream ware, medium, reddish surface, inverted rim, folded back. C, I, Room 4.
16. D 2146. Rim. Medium fine ware, inverted rim. C, I, NW. corner.
17. D 2265. Rim. Gray, medium ware, buff slip, plain rim with ridge about 1 cm. below edge. C, I, Room 4.
18. D 2122. Handle. Pink slip, gray core, coarse ware, red paint. C, I, NW. corner.

Plate 61

1. D 1791. Rim. Plain rim of neck and fragment of body, buff slip and dark-brown paint in pattern of crossing lines. Cf. *Athlit*, Pl. XXVIII; *Abū Ghōsh II*, Pl. F, 32; *Mefjer*, Pl. XVI, 16. Arab. C, I, NW. corner.
2. 66:27 and 67:17
3. 67:12
4. 67:3
5. 66:9
6. D 1782. Body. Buff slip, dark-brown painted lines, coarse ware, dark gray core. Arab. C, I, NW. corner.
7. 67:18
8. 67:1
9. D 1780. Rim. Pinkish inside, brown painted lines outside, gray core, plain, slightly flaring rim. Arab. C, I, NW. corner.
10. D 2392. Rim. Light-brown ware, fine, out-turned rim, yellow glaze inside and out, incised straight line and circle pattern. Arab. B, I, N. of Wall 1, W. of Wall 6.
11. D 2322, D 2326, D 2327. Body. Buff surface, coarse ware, gray core, brown painted wavy line pattern on outside. Arab. B, I, N. of Wall 1, resting on flagstones.
12. D 2316. Rim. Pinkish, inverted rim. B, I, N. of Wall 1.
13. D 2306. Handle. Brown ware, white slip, deep central groove, strap handle. B, I, N. of Wall 1.
14. D 2309. Handle. Pinkish, gray core, buff slip, grits; coarse ware, horizontal handle, carbon

deposit beneath suggest cooking pot. Arab. B, I, N. of Wall 1.
15. D 2251. Rim. Cream, collar rim, reddish surface inside. Arab. B, I, S. of Wall 3.
16. D 2260. Rim. Reddish, sloping rim and ridge outside with ribbing below. Arab. B, I, S. of Wall 3.
17. D 2256. Rim. Reddish, gray core, flat rim, two grooves outside and below rim. B, I, S. of Wall 3.
18. D 2307. Handle. Hard gray ware, horizontal loop handle, joined to body obliquely, sharp ridge on top. Arab. B, I, N. of Wall 1.

Plate 62A

1. 65:9
2. D 2583. Rim. Reddish surface, medium coarse ware, red paint outside. Arab-Byz. C, I, S. corner, outside Bldg. A.
3. 65:14
4. 71:5
5. D 2550 and D 2577. Bowl. Fine, thin gray ware, plain rim on vertical side of shallow bowl, disk base. Nab.-Rom. C, I, S. corner.
6. 70:21
7. 65:10
8. D 2554. Base. Fine, thin gray ware, disk base of small bowl. Nab.-Rom. C, I, S. Corner.
9. D 2147. Rim. Pinkish, medium fine, collared rim, flaring. C, I, NW. corner.

Plate 62B

1. D 3209-2. Bowl rim. Reddish, brown paint on "egg-shell" ware, plain rim. Cf. *Negeb I*, Pl. XLV, XLVI, XLVII; *Amman III*, Fig. 3 and 4; *Petra II*, Figs. 16 ff., Pl. XXXIII ff. *EEP*, Pl. 24 and 25; *EEP*, Pl. 31A and 31B. Nabataean. A, III, W. of area.
2. D 3233-1. Bowl rim. Cf. 1 above. Nabataean. E, III, beneath W. key.
3. D 3233-2. Cf. 2 above.
4. D 3233-3. Cf. 2 above.
5. D 3217-5. Cf. 1 above; A, III.
6. D 3151-7. Cf. 1 above; B, III, central area.
7. D 3217-13. Cf. 5 above.
8. D 3151-8. Cf. 6 above.
9. D 3098-1. Cf. 1 above; D, III, S. of Wall 12.
10. D 3233-4. Cf. 2 above.
11. D 3104-6. Cf. 1 above; B, III, Central area.
12. D 3118-4. Cf. 1 above; A, III, Sect. a.
13. D 3233-6. Cf. 2 above.
14. D 3209-1. Cf. 1 above.
15. D 3233-5. Cf. 2 above.
16. D 3147-7. Cf. 1 above; A, III.

Plate 63

1. 76:11
2. 76:12
3. 76:14
4. 75:17
5. 75:12
6. 75:19
7. 75:14
8. 74:5
9. 74:6
10. 74:8
11. 76:6
12. 76:8
13. 76:13
14. 76:3
15. 75:6
16. 75:10
17. 75:7
18. 74:4
19. 74:11
20. 74:10
21. 74:14

4. Plates 64-79: Drawings of Pottery

Plate 64

1. 54:1. D 2174. Pitcher. Pink-buff ware, poorly fired, HM, traces of brown paint outside, porous. Cf. *Abū Ghōsh II*, Pl. G, 41. Arab. C, I, Room 7.
2. 54:2. D 1932. Jar. Buff, poorly fired, HM, porous, containing eggshells. Arab. C, I, NW. corner.
3. D 3242. Handle and rim. Buff, poorly fired, HM, porous, strap handle, traces of brown paint on rim. Arab. B, I, Pit in Room 4, beneath floor level, Bldg. A.
4. D 3002. Body. Pink slip, heavy, coarse ware, HM, serpentine molding affixed before firing, from large jar. Cf. *Abū Ghōsh II*, Pl. G, 6; p. 140. Arab. B, I, Between floors 1 and 2, Bldg. A.
5. D 1742. Rim and handle. Buff, medium hard ware, body ribbed inside and out. Arab.-Byz. A, I, NW. corner.
6. D 2094. Rim and handle. Reddish, gray core, inverted rim, strap handle. Arab. B, I, N. of Wall 1.
7. D 2923. Rim and handle. Reddish, medium fine ware, strap handle, shallow ribbing on body. C, I, S. of Room 7.
8. D 3244. Jar rim. Pink slip, red paint in wavy parallel lines outside, also on rim and to 3 cm. below (inside); coarse ware, poorly fired. Arab. B, I, Pit beneath floor level, Room 4, Bldg. A.
9. D 3241. Jar rim. Buff slip, red paint in geometric design on outside, also on rim and to 3 cm. below (inside); coarse ware, poorly fired. Cf. *Abū Ghōsh II*, Pl. F, 3, 10; *Hazor I*, Pl. LXVI, 3. Arab. B, I, Pit beneath floor level, Room 4, Bldg. A.
10. D 2588. Pitcher. Buff slip, brown paint outside, medium coarse ware, strap handle. Cf. *Beth-shan II*, XXV, 2; *Abū Ghōsh II*, Pl. F, 1, 2; *PAM Cat.* No. 32.2154 (Tell el-'Ajjul). Arab. C, I, on floor of Room 4, Bldg. A.

Plate 65

1. D 1864. Dish rim. Coarse ware. Arab. A, I, N. central.
2. D 2864. Bowl rim. Pinkish-buff ware, gray core, slip outside and inside, medium coarse, slight carination. Arab.-Byz. C, I, Room 7, Bldg. A.
3. D 1706. Dish rim. Gray ware, brown-gray slip inside and over rim. *Abū Ghōsh II*, Pl. B, 4. Arab. C, I, NW. corner.
4. D 1827. Jar rim. Pink-buff ware, white slip outside over close ribbing. Arab.-Byz. B, I, N. corner.
5. D 3214-1. Jar rim. Gray, medium hard ware, closely ribbed on body. Arab.-Byz. E, I, above Wall 11.
6. D 1760. Jar rim. Gray ware, body ribbed, ribbing on edge of rim. Arab.-Byz. B, I, NW. corner.
7. D 1911. Jar rim. Reddish ware, buff outside, ridge 2 cm. below rim. Arab.-Byz. A, I, N. central.
8. D 1862. Jar rim. Thin buff ware, A, I, N. central.
9. 62A:1. D 2572. Jar rim. Gray ware, 2 molded ridges below rim on outside. C, I, S. corner outside Bldg. A.
10. 62A:7. D 2267. Jar rim. Cream ware, medium hard, reddish slip, inverted rim folded back. C, I, Room 4.
11. D 1761. Jar rim. Pink ware, gray soft core, massive collared rim, surface medium hard. B, I, NW. corner.
12. D 1925. Jar rim. Blackened ware, ribbing on body outside. A, I, N. central.
13. D 1705. Jar rim. Reddish ware with cream slip outside. Ribbing on rim with broad flat horizontal depression below on outside. C, I, NW. corner.
14. 62A:3. D 2431. Jar rim. Buff outside and inside with brown painted parallel lines outside, gray core, medium coarse ware. Arab. C, I, Room 7.
15. D 1791. Jar rim. Buff slip with crisscross lines of dark brown paint outside. Arab. C, I, NW. corner.
16. D 1912. Jar rim. Reddish ware, deep horizontal groove outside, wavy combing beneath. Arab.-Byz. A, I, N. central.
17. D 1861. Jar rim. Coarse ware. A, I, N. central.
18. D 1709. Jar rim. Fine, reddish ware. C, I, NW. corner.
19. D 1828. Jar rim. Brownish-red ware, white slip outside and over rim which is thickened and ribbed outside. Arab.-Byz. B, I, N. corner.
20. D 2870. Jar rim. Heavy buff ware. A, I, section a.
21. D 1710. Jar rim. Heavy coarse ware, plain rim with wavy incisions outside, on top, and inside of rim. Cf. *Mefjer*, Fig. 12, 4. Arab. C, I, NW. corner.

Plate 66

1. D 2827. Body. Fine buff ware, buff slip, dark-red painted design outside; broad, shallow ribbing inside. Arab.-Byz. A, I, sounding.
2. D 2465. Body. Reddish ware, raised rosette molding outside. Arab. A, I, NW. corner.
3. D 3216-2. Lamp. Reddish ware with herring bone pattern mold. Cf. *Abū Ghōsh II*, Fig. 33, 9. Arab. F, I, Ramp.
4. D 3113-3. Lamp. Buff ware, gray core, trace of carbon deposit. Cf. *Mefjer*, Pl. 18, 3. Arab. B, I, Central area.
5. D 2200. Lamp. Buff ware, poorly fired, thumb indented handle, floral design on sides. Cf. *Mefjer*, Pl. 18, 1. Arab. A, I, N. central.
6. D 1967. Lamp. Buff ware, poorly fired, molded pomegranate pattern in relief around body; vertical thumb handle with two incised grooves in middle. Cf. *Mefjer*, Pl. 17, 1. Arab. C, I, NW. corner.
7. D 1738. Lamp. Design of vine and fruit on body. Cf. *Abū Ghōsh II*, Fig. 33, 4. Arab. A, I, NW. corner.
8. D 1708. Base. Gray ware. C, I, NW. corner.
9. 61:5. D 1799. Rim. Fine pinkish ware, light gray core, buff slip outside; medium brown slip or paint applied on rim in radial strokes and horizontally below rim outside. Arab. A, I, NW. corner.
10. D 2887. Bowl. Medium hard ware, reddish, burned as if used as cooking utensil. Arab. B, I, S. of Wall 3.
11. D 2980. Lamp. Reddish ware, cream slip, diagonal line molding on slipper-shape body. Cf. *Nebo I*, Pl. 143, 13; *Silet ed-Dhahr*, Fig. 48; *Dibon*, Part I, Pl. 18:4. Byz. B, II, between floors 1 and 2, Bldg. A.
12. D 2974. Base. Gray ware, grits, dark-gray slip. A, II, W. side.
13. D 3156-4. Base. Reddish ware, blackened on outside with carbon deposit. E, II-III, S. of Wall 11.
14. D 2850. Base. Medium fine ware, cream slip, faint spiral groove on inside. A, II, sounding B.
15. D 1857. Base. Buff ware, gray core, HM. Arab. A, I, N. central.
16. D 1729. Base. Thin, reddish ware. A, I, NW. corner.
17. D 1730. Base. Fine buff ware, concave base with knob in center. A, I, NW. corner.
18. D 2060. Base. Reddish slip, disk base. Arab. A, I, N. side.
19. D 1728. Base. Fine buff ware, horizontal combing on body. Arab.-Byz. A, I, NW. corner.
20. D 2975. Base. Medium hard, light-brown slip, grits. Arab.-Byz. A, II, W. side.
21. D 1704. Base. Soft gray ware, blue-green glaze inside and out. Arab. C, I, NW. corner.
22. D 1734. Base. Fine red ware, gray core. Cf. *Mefjer*, Fig. 11, 6. Arab. A, I, NW. corner.
23. D 1703. Base. Coarse ware, gray core, orange-brown slip outside and inside. C, I, NW. corner.
24. D 2088. Base. Reddish surface, gray core, flat bottom with concentric grooves. Cf. *Abū Ghōsh II*, Pl. B, 21. Arab. B, I, N. of Wall 1.

25. D 1941. Base. Coarse reddish ware, light ribbing on inside. Cf. *Abū Ghōsh II*, Pl. G, 15. Arab. C, I, NW. corner.
26. D 1702. Base. Reddish ware, white slip outside and on bottom on base, ribbing inside. Arab. C, I, NW. corner.
27. 61:2 and 67:17. D 1701. Base. Coarse buff-green ware. Geometric design in brown paint on interior of dish. Cf. *Athlit*, Pl. XXVII, *Abū Ghōsh II*, Pl. F, 34; *Mefjer*, Fig. 9, 36. Arab. C, I, NW. corner.

Plate 67

1. 61:8. D 1720. Body. Coarse ware, pink slip, brown painted lattice design. Cf. *Mefjer*, Pl. XVI, 6; Fig. 9, 9. Arab. C, I, NW. corner.
2. D 1850. Handle. Pinkish ware, gray core, plain "ledge" handle. Cf. *Mefjer*, Fig. 12, 25. Arab. A, I, N. central.
3. D 1713. Body. Buff ware, cream slip, brown paint in geometric pattern outside. Cf. *Abū Ghōsh II*, Pl. XVII, *Beth-shan II*, Pl. XXV, 2; *Athlit*, Pl. XXVIII. Arab. C, I, NW. corner.
4. D 2081. Handle. Crude ware, poorly fired, carbon deposit, "ledge" handle from cooking pot. Cf. 67:2. Arab. A, I, NW. corner.
5. D 1721. Body. Buff slip, brown painted geometric pattern on outside. Arab. C, I, NW. corner.
6. D 2730. Rim and body. Pink slip outside, inside and on rim, gray core, deeply incised "cut work" on outside, light thumb indentation on rim. Cf. *Mefjer*, Pl. XXI, 7, 9; *EEP III*, Pl. 21. Arab. A, I, W. side.
7. D 2061. Rim. Cream slip, brown painted wavy line on rim, pattern on outside, medium fine pinkish ware. Cf. *Nebo I*, Pl. 156, Nos. 23-25; *EEP III*, Pl. 21, p. 267. Arab.-Byz. A, I, N. side.
8. D 3014. Neck. Pink-buff ware, gray slip, plain rim of jug rim. Arab.-Byz. B, I, Bldg. A, between floors 1 and 2.
9. D 2235. Pitcher mouth. Medium fine cream ware, pink slip on outside. Arab.-Byz. A, I, E. central sounding.
10. D 2144. Body. Medium coarse ware, dark-red slip, burnished outside and inside. C, I, NW. corner.
11. D 2364. Body. Medium coarse ware, gray core, buff slip, painted brown decoration. Cf. *Athlit*, Pl. XXVIII. Arab. B, I, inside Bldg. A.
12. 61:3. D 1778. Rim. Heavy, well-fired, pinkish ware, thumb-indented "rope" design below rim. Cf. *Nebo I*, Pl. 152, Nos. 1-12. Arab.-Byz. C, I, NW. corner.
13. D 2953. Pitcher mouth. Medium-fine, buff ware, vertical groove in top of strap handle. Arab.-Byz. C, I, SW. corner (outside) Bldg. A.
14. D 1933. Body. Coarse ware, gray core, reddish inside, cream slip, brown paint on outside. Cf. 67:3. Arab. C, I, NW. corner.
15. D 3141-1. Stone polisher. Porous, rough pumice stone. Cf. *Tell Beit Mirsim III*, Pl. 64, 18. B, fill in Wall 7.
16. D 1707. Rim. Coarse gray ware with indented molding added to exterior; orange-brown exterior. Cf. *Abū Ghōsh II*, Pl. F, 8. Arab. C, I, NW. corner.
17. 61:1 and 66:27. D 1701. Base. Coarse buff-green ware. Arab. C, I, NW. corner.
18. 61:7. D 1712. Body. Buff slip, coarse ware; brown paint in geometric patterns, including lattice and checker-board. Cf. 67:3, 14. Arab. C, I, NW. corner.
19. D 3100-1. Rim. Medium hard ware, pinkish with cream slip; dark-brown painted pattern. Cf. 67:7. Arab.-Byz. D, I, S. of Wall 12.
20. D 1711. Handle. Fine, reddish ware; oblique strap handle curving upwards; three shallow ridges on outside. Cf. *Abū Ghōsh II*, Pl. G, 38; Pl. XVIII, 1. Arab. C, I, NW. corner.

Plate 68

1. 56:10. D 3236. Bowl. Medium fine, reddish ware with gray core. Cf. *Petra II*, Pl. XXVII, 228a. Nab. E, III, beside W. key.
2. D 2557 and D 2550. Bowl. Fine gray ware. Cf. *Qumran III*, Fig. 4, 2. Nab.-Roman. C, I, S. corner, outside Bldg. A.
3. 56:9. D 3179. Bowl. Fine gray ware. Cf. *Petra II*, Pl. XIV, 73; *Jericho II*, Pl. 59, 37. Nab. A, III, against Nab. wall.
4. D 3131. Bowl. Reddish metallic ware, orange-red slip, traces of burnish. Nab. D, III, S. of Wall 12.
5. 56:8. D 3231 and D 3233. Bowl. Fine reddish ware. Cf. *Qumran III*, Fig. 5, 7. Nab.-Rom. E, III, beneath W. Key.
6. 55:1. D 3129. Bowl. "Eggshell" ware; reddish with dark-red painted design. Cf. *Petra II*, Figs. 22-26; Pls. XXXIII-XXXVII; *Petra III*, Pl. 17, D; *EEP I*, Pl. 25a, 25b; *QDAP*, VI, Pl. III; *EEP II*, Pls. 31A, 31B; *Negeb I*, Pl. XLV, XLVI, XLVII. Nab. D, III, S. of Wall 12.
7. 55:4. D 3235. Bowl. Cf. 68:6. Nab. E, III, W. side.
8. 55:2. D 3130. "Eggshell" ware; reddish with black painted design. Cf. 68:6. Nab. D, III, S. of Wall 12.
9. 55:3. D 3127. Bowl. Cf. 68:6, except this bowl has the addition of fine parallel lines in the pattern. Nab. B, III, near walls 8 and 9.

Plate 69

1. D 3092-7. Lamp. Buff ware, carbon deposit. Cf. *Amman III*, Pl. XX, 2; *Qumran III*, Fig. 4, 14; *Beth-shan I*, Pl. L, 26. Roman. C, II-III, S. of Wall 12.
2. D 3116-3. Lamp. Reddish ware, medium fine. Cf. *Petra II*, Pl. XLX, 424b. Roman. E, II-III, S. of Wall 8.
3. 56:7. D 3164. Lamp. Reddish ware. Cf. 69:1. Roman. A, III, at base of Nab. Wall.
4. D 3173-4. Lamp. Reddish ware; vertical thumb

handle. E, II-III, S. of Walls 11 and 9.

5. D 3094-1. Lamp. Buff ware, carbon deposit. Cf. 69:1. Roman. D, III, S. of Wall 12.
6. 56:6. D 3228. Lamp. Reddish ware. Cf. *Ader*, Pl. 20, C. Nab. D, III, W. of E. key.
7. D 3229. Bowl. Fine reddish ware, two strap handles. Cf. *Petra II*, Fig. 19, 232. Nab. E, III, beneath W. key.
8. 56:1. D 3128. Pitcher. Pinkish ware, medium fine, body ribbing on outside, one strap handle. Cf. *Petra II*, Pl. XXVIII, 223, see also 70:6, 7 below. Nab. D, III, S. of Wall 12.
9. 56:5. D 3236. Cooking pot. Reddish ware, ribbed, carbon deposit on bottom. Nab. Cf. *Amman IV*, Fig. 1, 41; *Jericho I*, Pl. 27, N 32; *Samaria I*, Fig. 70, 9; *Petra III*, Pl. 16, A and D. Rom.-Nab. E, III, W. side.
10. 56:2. D 3133. Pitcher. Reddish ware, hard and ringing quality, one strap handle, rouletted on upper part of body. Cf. *Amman IV*, Fig. 1, 50; *Petra II*, Pl. XXVIII, 224. Nab. D, III, S. of Wall 12.
11. 59:3. D 3230. Pitcher. Description same as 69:10. Nab. E, III, beneath W. key.
12. 56:3. D 3165. Pitcher. Medium fine gray ware, ribbing on outside, strap handle. Nab. E, III, beside W. key.
13. 56:4. D 3232. Pitcher. Fine reddish ware, ribbing on body. E, III, beneath W. key.

Plate 70

1. D 3095-2. Body. Reddish ware, hard, rouletted. Nab. Cf. 69:10. D, III, S. of Wall 12.
2. D 3076-6. Juglet base. Fine, pinkish ware, pointed base, ribbing on body. A, II-III, sect. a.
3. D 3116-2. Juglet base. Fine, pinkish ware. E, II-III, S. of Wall 8.
4. D 3190-12. Juglet. Fine, pinkish ware, HM. Nº A, III, near Nab. Wall.
5. D 3125-1. Juglet base. Medium coarse, heavy ware, buff. B, above Wall 9.
6. D 3217-4. Juglet base. Pinkish ware, medium fine, body ribbing on outside. Cf. 69:8. Nab. A, III.
7. D 3118-8. Juglet base. Pinkish ware, medium fine, body ribbing on outside. Cf. 70:6; 44:8. A, III, sect. a.
8. D 3218-18. Bowl rim. Fine, pinkish ware. Nab. A, III, near Nab. Wall.
9. D 3180. Dish. Reddish, metallic ware, concentric incised circles on flat bottom. Nab. E, III, E. side.
10. D 1801. Dish rim. Buff ware, dark-red "terra sigillata," two grooves on rim. Roman. A, I, NW. corner.
11. D 3175-11. Bowl rim. Pinkish ware, gray on outside. Nab. A, III.
12. D 3097-1. Bowl rim. Pinkish, medium fine ware. Nab. D, III, S. of Wall 12.
13. D 3119-1. Bowl rim. Fine, reddish ware, "rouletted" on bottom. Cf. *Petra II*, Pl. IX, 22. Nab. B, II-III, between Walls 7-8.
14. D 3097-5. Jar base. Fine, dark-red "sigillata" ware. Roman. D, II-III, S. of Wall 12.
15. D 3097-3. Bowl. Fine, pinkish ware. Nab. D, II-III, S. of Wall 12.
16. D 3234-1. Jug base. Pinkish, medium fine ware, broad ribbing on outside, shallow ring base. Nab. A, III, near Nab. Wall.
17. D 3092-5. Jug base. Pinkish, medium fine ware, molded ring base. Nab. C, II-III, S. of Wall 12.
18. D 3190-8. Jug base. Fine buff ware, red "sigillata" surface outside, irregular ribbing inside. Cf. *Petra II*, Fig. 53, 400. Rom. A, III, near Nab. Wall.
19. D 3120-1. Dish. Fine buff ware, red "sigillata" surface outside and inside. Cf. *Samaria I*, Fig. 68, 11. Roman. D, III, S. of Wall 12.
20. D 3173-2. Jug base. Pinkish, medium fine ware, vertical band of brown paint on outside. Nab. E, II-III, S. of Walls 11 and 9.
21. 62A:6. D 2549. Bowl. Fine buff ware, red "sigillata" surface outside and inside, plain rim, ring base. Cf. *Petra II*, X, 36. Roman. C, II-III, corner.
22. D 3117-7. Bowl. Cf. description and shape of 70:21. Cf. *Samaria I*, Fig. 66, 4. Roman. B, II-III, S. of Wall 7.

Plate 71

1. D 3096-4. Jar rim. Coarse, heavy ware, pink slip. Byz. D, II, S. of Wall 12.
2. D 3119-17. Jar rim. Coarse, heavy ware, pink slip. Byz. B, II, between Walls 7 and 8.
3. D 2963. Jar rim. Coarse gray ware, grits, light-gray slip. Iron II. B, II (intrusive), S. of Wall 3.
4. D 2553. Jar rim. Gray ware, reddish slip. Collar rim with ribbing outside. Cf. *Samaria I*, Fig. 71, 2-3. Nab.-Rom. C, II-III, outside Bldg. A.
5. 62A:4. D 2265. Bowl. Medium gray ware with buff slip, plain rim with ridge *ca.* 1 cm. below outside. Nab-Rom. C, I, Room 4.
6. D 2986. Jar rim. Pink ware with gray core and buff slip. Byz. B, II, S. outside Wall 3.
7. D 3234-7. Bowl rim. Fine buff ware with "sigillata" surfaces outside and inside. Cf. 70:13. Roman. A, III, near Nab. Wall.
8. D 3125-2. Cooking pot. Coarse gray ware, medium heavy, grits, HM, "ledge" handle. Arab.-Byz. B, I-II, above Wall 9.
9. D 3095-1. Bowl rim. Medium fine, pinkish ware. Nab. D, III, S. of Wall 12.
10. D 3190-3. Jar rim. Medium fine ware, buff slip. Rom.-Nab. A, III, near Nab. Wall.
11. D 3108-12. Pitcher mouth. Fine buff ware, "sigillata" surface outside and inside. Roman. B, I-II (intrusive), between Walls 7-8.
12. D 3234-11. Jug mouth. Medium fine ware with pink slip. Nab. A, III, near Nab. Wall.
13. D 3097-2. Jar rim. Fine ware with pink slip, notched decoration on rim. Rom.-Nab. D, III, S. of Wall 12.

14. D 3076-4. Juglet rim. Fine ware, pink slip, two grooves on top of handle. Rom.-Nab. A, II-III, sect. a.
15. D 3219-1. Pitcher mouth. Medium fine pinkish ware, gray slip, ridge on handle. Rom.-Nab. A, III.
16. D 3234-3. Pitcher mouth. Fine ware, pinkish slip. Nab. A, III, near Nab. Wall.
17. D 3095-5. Jar rim and handle. Medium fine buff ware. Rom.-Nab. D, III, S. of Wall 12.
18. D 3218-11. Jar rim and handle. Medium fine, pinkish ware. Rom.-Nab. A, III, near Nab. Wall.
19. D 3190-1. Jar rim and handle. Medium coarse, pinkish ware, broad ribbing, on outside. Cf. *Petra III*, Fig. 3. Rom.-Nab. A, III, near Nab. Wall.
20. D 3175-1. Jar rim and handle. Medium fine, pinkish ware, strap handle, broad ribbing on outside. Rom.-Nab. Cf. 71:19. A, III.
21. D 3234-6. Jar rim and handle. Fine ware, strap handle, close ribbing on outside, carbon deposit, possible cooking pot. Cf. 71:19. Rom. A, III, near Nab. Wall.
22. D 3071. Jar rim. Medium coarse buff ware, grits, gray core. Iron II. B, III (intrusive), S. of Wall 3.
23. D 3219-2. Jar rim. Medium coarse pinkish ware, gray core, orange slip outside and inside. Nab. A, III.
24. D 3217-2. Jar rim. Description and shape same as 71:23. Nab. A, III.

Plate 72

1. 57:1. D 3182. Water jar. Buff, medium hard ware, grits, hole patched with cream colored clay heated sufficiently to fuse to outside surface. Iron II. B, IV, Bin.
2. 57:2. D 3074. Large bowl. Gray, medium hard ware, grits, wheel marks on outside. No exact parallels, but for earlier and later bowls of a similar type Cf. *Tell Beit Mirsim III*, Pl. 12, 9; 20, 7; *Naṣbeh II*, Pl. 63, 1439; *Lachish III*, Pl. 81, 120. Iron II. B, IV, Bin.
3. 59:2. D 3227. Cooking pot. Dark gray coarse ware, roughly HM, carbon deposit on outer surfaces. Iron II. C, IV, between Walls 10-12 in oven.
4. DT 180. Bowl. Pinkish, coarse ware, small gray and white grits; flaking surface; fairly soft. Cf. *ADAJ*, II, Pl. IX, 9; *ADAJ*, III, Fig. 19, 29. Iron II. Tomb J 3.
5. D 3181. Jar. Reddish, medium coarse ware, grits. Iron II. B, IV, Bin.

Plate 73

1. D 3085-1. Jar rim. Buff, medium coarse ware, white grits. Cf. *Naṣbeh II*, Pl. 14, 245. Iron II. C, I, between Walls 10-12.
2. D 3124-2. Jar rim. Gray, medium coarse ware. Cf. *Naṣbeh II*, Pl. 26, 438. Iron II. C, III, N. of Wall 12.
3. D 3174-1. Jar rim. Red, medium coarse ware, white grits. Cf. *Tell Beit Mirsim III*, Pl. 14, 4. Iron II. C, III-IV, between Walls 10-12.
4. D 3090-2. Bowl rim. Buff, medium fine ware. Cf. *Meqabelein*, Pl. XVII, 11; *Sahab*, Fig. 3, 8. C, III-IV, between Walls 10-12.
5. D 3186-5. Bowl rim. Cream, medium fine, grits, wheel marks outside and inside. Cf. *Tell Beit Mirsim III*, Pl. 21, 5. Iron II. B, IV, Central area.
6. D 3186-1. Bowl rim. Gray ware, fine, red burnish, wheel marks outside. Cf. *Meqabelein*, Pl. XVII, 15. Iron II. B, IV, Central area.
7. D 3183-1. Bowl rim. Gray ware, medium fine, red, wheel burnish on top of rim and inside. Cf. *Meqabelein*, Pl. XIV, 6; *Tell Beit Mirsim III*, Pl. 21, 8. Iron II. B, IV, Central area.
8. D 3085-4. Bowl rim. Medium coarse ware, cream, grits. Cf. *Naṣbeh II*, Pl. 55, 1233. Iron II. C, III-IV, Between Walls 10-12.
9. D 3174-3. Jar rim and handle. Buff, coarse ware, grits, wheel marks inside. Cf. *Naṣbeh II*, Pl. 46, 969. Iron II. C, III-IV, between Walls 10-12.
10. D 3154-11. Jar rim. Coarse, cream ware, poorly fired, grits. Cf. *Tell Beit Mirsim III*, Pl. 14, 2. Iron II. B, IV, Central area.
11. D 3088-3. Jar rim. Buff, medium coarse, large and small grits. Iron II. C, III-IV, Between Walls 10-12.
12. D 3162-6. Jar rim. Buff inside, cream outside, coarse ware, poorly fired, grits. Cf. *Naṣbeh II*, Pl. 16, 268. Iron II. B, IV, Central Area.
13. D 3162-9. Jar rim. Buff, coarse ware, grits. Iron II. B, IV, Central Area.
14. D 3205-1. Bowl rim. Medium coarse ware, buff, wheel marks on inside, cream slip on outside, hole cut after firing, grits. Cf. *Naṣbeh II*, Pl. 53, 1163. Iron II. C, IV, Between Walls 10-12.

Plate 74

1. D 3089-2. Pitcher rim. Buff, medium fine ware, gray core, grits. Iron II. C, IV, N. of Wall 12.
2. D 3186-4. Pitcher rim. Buff, medium coarse ware, gray core, very fine grits. Cf. *Naṣbeh II*, Pl. 31, 541. Iron II. B, IV, Central Area.
3. D 3069. Jar rim. Buff, medium coarse ware, gray core, grits. Iron II. B, IV, near Wall 7.
4. D 3089-3. Jar rim. Buff, very coarse ware, HM. Iron II. Cf. *Beth-zur* I, Pl. IX, 15. C, IV, N. of Wall 12.
5. D 3124-3. Bowl rim and handle. Buff, coarse ware, poorly fired, cream slip outside and inside. Cf. *Naṣbeh II*, Pl. 61, 1419. Iron II. C, IV, N. of Wall 12.
6. D 3205-3. Bowl rim and handle. Red, medium coarse ware, white grits, well fired, carbon on handle suggests cooking pot. Iron II. C, IV, between Walls 10-12.
7. D 3154-10. Bowl rim and handle. Cream, medium

coarse ware, handle poorly attached. Cf. ***Tell Beit Mirsim III***, Pl. 20, 16. Iron II. B, IV, Central area.

8. D 3183-5. Bowl rim and handle. Buff ware, heavy, metallic sounding, wheel marks inside and outside, grits, handle crudely attached at bottom. Cf. ***Naṣbeh II***, Pl. 62, 1427. Iron II. B, IV, Central area.
9. D 3088-10. Ledge handle. Buff ware, carbon deposit on top, grits. EB III-IV (intrusive). C, III-IV, Between Walls 10-12.
10. D 3088-8. Body. Medium coarse buff ware with dark-red concentric circles, burnishing. Iron II. C, III-IV, Between Walls 10-12.
11. D 2761. Body. Medium coarse ware, gray core, dark-red, burnishing (wheel) inside, dark-red with parallel, dark-gray lines and burnishing outside. Iron II. B, I (intrusive), S. of Wall 3.
12. D 3089-1. Body. Medium coarse ware, gray core, red, wheel burnished inside. Iron II. C, IV, N. of Wall 12.
13. D 3072. Spindle whorl. Coarse reddish ware, pierced by hole, the edges of which are beveled. B, II, near Wall 7.
14. D 3205-2. Spindle whorl. Coarse reddish ware, pierced by hole, the edges of which are beveled, from large jar which had cream slip on outside. C, IV, Between Walls 10-12.

Plate 75

1. D 3167-1. Tripod cup. Coarse gray ware, grits, flat bottom with fragment of one leg of a three-legged bowl. Cf. ***Naṣbeh II***, Pl. 63, 1442; ***Sahab***, Pl. XXV, 21, 23, 24; Fig. 4, 22-30. Iron II. E, III-IV, E. side.
2. D 2988. Base. Buff, coarse ware, gray core, cream slip outside, grits. Iron II. B, IV, near Wall 7.
3. D 3166. Bowl. Medium fine buff ware, high ring base, pink-buff slip, wheel burnished inside and over rim, very few grits. Cf. ***Meqabelein***, Pl. XVII, 16. Iron II. B, IV, central area.
4. D 3085-2. Base. Coarse buff ware, well-fired, light-buff slip outside, large and small grits. Iron II. C, II (intrusive), Between Walls 10-12.
5. D 3085-3. Coarse buff ware, light-buff slip outside, small grits. Iron II. C, II (intrusive), Between Walls 10-12.
6. D 3174-2. Juglet base. Medium coarse buff ware, fine tan, burnishing on base and vertical burnishing on body, small grits. Iron II. Cf. ***ADAJ***, III, Fig. 21, 64. C, III-IV, Between Walls 10-12.
7. D 3162-8. Base. Coarse buff ware, light-buff slip outside, small and large grits. Cf. ***Tell Beit Mirsim III***, Pl. 24, 23; ***Tirzah I***, Fig. 8, 10. Iron II. B, IV, Central area.
8. D 3088-5. Base. Coarse buff ware, light-buff slip outside, small and large grits. Cf. ***Sahab***, Fig. 6, 61; 3, 1; ***ADAJ***, III, Fig. 19, 10. Iron II. C, III-IV, Between Walls 10-12.
9. D 3088-9. Base. Coarse buff ware, shallow ring base, large and small grits. Cf. ***Naṣbeh II***, Pl. 55, 1255. Iron II. C, III-IV, Between Walls 10-12.
10. D 3183-3. Base. Coarse buff ware, red, burnish on inside, grits. Cf. ***ADAJ***, III, Fig. 19, 9. Iron II. B, IV, Central area.
11. D 3162-2. Bowl rim. Medium coarse buff ware, wheel marks inside, small grits. Cf. ***Meqabelein***, Pl. XVII, 12. Iron II. B, IV, Central area.
12. D 3085-6. Bowl. Medium coarse gray ware, red, horizontal burnish outside, inside and on rim, small grits. Iron II. C, II (intrusive), Between Walls 10-12.
13. D 3109-3. Rim. Medium coarse gray ware, buff slip on all surfaces, small grits. Iron II. B, I (intrusive), N. Wall 7.
14. D 2543. Rim. Medium heavy ware, gray core, buff slip, grits. Cf. ***Naṣbeh II***, Pl. 3, 39. Iron II. C, II (intrusive), corner.
15. D 3107-6. Rim. Medium coarse gray ware, grits, carbon deposit on outside suggests cooking pot. Cf. ***Sahab***, Fig. 3, 12. Iron II. B, IV, near Wall 7.
16. D 3150-2. Rim. Medium coarse buff ware, grits. Iron II. C, IV, Between Walls 10-12.
17. D 3178-1. Rim. Medium heavy ware, gray core, pinkish slip outside, grits. Cf. 76:8. Iron II. B, IV, Central area.
18. D 3199. Rim. Coarse buff ware, wheel marks inside, small grits. Cf. ***Tell Beit Mirsim III***, Pl. 13, 9; ***Gibeah***, Pl. 22, 2. Iron II. B, IV, Central area.
19. D 3124-1. Rim. Medium coarse ware, gray core, pinkish slip, grits. Iron II. C, IV, N. of Wall 12.
20. D 3194. Rim. Medium coarse ware, small grits. Iron II. B, III-IV, above Wall 7.

Plate 76

1. D 3162-5. Rim. Medium heavy, gray ware, buff slip, grits. Cf. ***Naṣbeh II***, Pl. 25, 416. Iron II. B, IV, Central area.
2. D 3088-6. Rim. Coarse gray ware, reddish slip, grits. Iron II. C, III-IV, between Walls 10-12.
3. D 3088-7. Rim. Medium heavy ware, reddish slip on all surfaces, small grits. Iron II. C, III-IV, Between Walls 10-12.
4. D 3150-1. Rim. Medium coarse buff ware, many grits in surfaces. Cf. ***Megiddo I***, Pl. 29, 111. Iron II. C, IV, Between Walls 10-12.
5. D 3090-1. Jar. Medium fine, metallic sounding ware, buff slip on surfaces, many grits. Iron II. C, III-IV, Between Walls 10-12.
6. D 3186-2. Heavy rim. Coarse ware, gray core, reddish surfaces, grits. Cf. ***Naṣbeh II***, Pl. 3, 45. Iron II. B, IV, Central area.
7. D 3090-4. Rim. Heavy coarse ware, gray core, reddish surfaces, grits. Cf. ***Naṣbeh II***, Pl. 3, 38. Iron II. C, III-IV, Between Walls 10-12.
8. D 3183-2. Rim. Medium heavy ware, gray core, pinkish slip outside, grits. Cf. 75:17; ***Naṣbeh II***, Pl. 3, 44. Iron II. B, IV, Central area.

9. D 3162-4. Rim. Medium fine gray ware, buff surfaces, small grits. Cf. *Naṣbeh II*, Pl. 25, 406. Iron II. B, IV, Central area.
10. D 3199-1. Rim. Medium coarse gray ware, buff surfaces, small and large grits. Cf. *Tell Beit Mirsim III*, Pl. 15, 12. Iron II, B, IV, Central area.
11. D 3154-2. Rim. Coarse ware, gray core, pinkish slip, wheel marks inside and outside, many grits. Iron II. B, IV, Central area.
12. D 3088-4. Rim. Medium heavy ware, gray core, dark-red surfaces, grits, carbon deposit suggests cooking pot. Cf. *Naṣbeh II*, Pl. 47, 1005; *EEP IV*, Pl. 61, 7. Iron I to II. C, III-IV (intrusive), Between Walls 10-12.
13. D 3088-1. Jar rim. Coarse ware, buff slip on surfaces, large grits, wheel marks on surfaces. Iron II. C, III-IV, Between Walls 10-12.
14. D 3088-2. Jar rim. Coarse ware, gray core, pinkish surfaces, large and small grits. Iron II. C, III-IV, Between Walls 10-12.
15. D 3107-10. Jar rim. Coarse ware, gray core, pinkish surfaces, many grits, perhaps one section of a scalloped rim. Iron II. B, IV, near Wall 7.
16. D 3107-9. Rim. Medium coarse ware, cream slip outside, pinkish surface beneath, many grits. Cf. *Naṣbeh II*, Pl. 3, 36. Iron II. B, IV, near Wall 7.

Plate 77

1. DT 127. Juglet. Fine pinkish ware. Cf. *PAM*. No. 40.472; *Dibon II*, p. 24, Fig. 10, first, second and top shelves. Iron II. Tomb J 3.
2. DT 98-2. Juglet. Medium fine pinkish ware. Iron II. J, Sounding 3, Grave 1.
3. 59:10. DT 75. Juglet. Medium fine pinkish ware, small grits, irregular rim and body, wheel marks. Iron II. Tomb J 3.
4. DT 64. Pitcher. Whitish ware, faint traces of thin slip, wheel marks inside body, fairly hard. Iron II. J, sounding in approach of Tomb J 3.
5. DT 98-1. Juglet. Pinkish, medium fine ware, prominent ridge at top of handles. Cf. *Sahab*, Fig. 7, 63. Iron II. J, Sounding 3.
6. DT 104-1. Decanter. Medium coarse ware, pinkish slip, prominent ridge at top of handle. Cf. *Beth-zur I*, Pl. IX, 5; *Sahab*, Fig. 6, 57. Iron II. J, Sounding 3, Grave 1.
7. 59:12. DT 81. Juglet. Red ware, three horizontal black bands on body, one band on neck, ridge on neck. Iron II. Tomb J 3.
8. 59:8. DT 107. Juglet. Fine pinkish-buff ware, half slip, lightly burnished. Bands of brown decoration. Wheel marks inside. Hard ware. Cypro-Phoenician type; cf. *Dibon IV*, p. 24, Fig. 10, second shelf. Iron II. Tomb J 3.
9. 59:13. DT 74. Bottle. Pinkish ware, thin cream slip, six horizontal black bands. Cf. *Sahab*, Pl. XXXV, 42; *Meqabelein*, Pl. XVI, 17 (longer in body), Fig. 4, 34-37; *Amman I*, Fig. 13; also several Palestinian specimens in student galleries of *PAM*. Iron II. Tomb J 3.
10. 59:7. DT 133. Juglet. Pinkish ware, traces of self slip; small white grits, softish ware; wheel marks inside. Cf. *Naṣbeh II*, Pl. 38, 675. Iron II. Tomb J 3.
11. 59:1. DT 125. Juglet. Pinkish-buff ware, self slip; darker pink, vertical burnishing; hard ware. Cf. 77:6; *Hazor I*, Pl. LXII, 12. Iron II. Tomb J 3.
12. DT 100. Knobbed lid. Medium coarse ware, pinkish self slip, grits, wheel marks on top. Cf. *Naṣbeh II*, Pl. 74, 1681. Iron II. J, Sounding 3, Grave 1.
13. 59:11. DT 71. Wheel. Reddish surface, poorly fired. HM. Perhaps wheel from toy cart or chariot; Cf. *Beth-shemesh*, p. 209, 8. Tomb J 3.
14. DT 56. Jar. Coarse, pinkish ware, soft, pitted by grits; burnished, bands of red bordered with black. Iron II. Cf. *EEP II*, Pl. 27A, 8; 28A, 18. J, Sounding 2.
15. 59:4. DT 55. Jar. Smooth red-brown ware; darker slip; burnished, bands of red bordered with black; fairly soft ware. Cf. 77:14. J, Sounding 2.

Plate 78

1. DT 131. Stone disk. Well-made, sandstone, red; smooth and perfectly round. Tomb J 3.
2. DT 52. Tripod cup. Grayish ware, possible slip; wheel marks inside; soft ware. Cf. 75:1. Iron II. J, approach to Tomb J 3, Sounding 2.
3. DO 128. Figurine. Buff, gray core, poorly fired, lower half of female figurine; grits. Cf. *Tell Beit Mirsim III*, Pl. 55, 3. C, I, Room 7.
4. DT 87. Figurine. Ram's head, pottery, pierced with hole through mouth and neck, tightly coiled horns, eyes deeply indented. J, Sounding 3, pit.
5. DT 105-3. Body. Fine buff ware, wheel marks inside, self slip, black and orange horizontal line decoration; lattice decoration in orange. Cf. *EEP II*, Pl. 27A, 1. J, Sounding 3.
6. DT 98-11. Jar handle and rim. Buff, medium soft ware, grits. J, Sounding 3, Grave 1.
7. 59:9. DT 80. Plate. Smooth whitish ware; some white grits; self slip; fairly hard ware. Cf. *Amman I*, Fig. 1, 3. Iron II. Tomb J 3.
8. DT 173. Jar rim. Grayish-white ware, few large white grits; fairly hard. Cf. *Naṣbeh II*, Pl. 65, 1483; *Hazor I*, Pl. LXI, 12. Iron II. Tomb J 3.
9. DT 176. Jar rim. Buff, soft ware; pinkish slip. Tomb J 3.
10. DT 172. Jar rim. Buff ware, tiny slate grits; traces of pinkish-brown slip; fairly hard. Cf. *Naṣbeh II*, Pl. 47, 1000; *Hazor I*, Pl. LII, 2. Iron II. Tomb J 3.
11. DT 171. Jar rim. Pale-buff ware; few gray grits; brownish-red slip; soft ware. Cf. *Naṣbeh II*, Pl. 62, 1433. J, Sounding 3.
12. DT 174. Jar rim. Buff, fairly hard ware; pinkish slip; few white grits. Cf. *Naṣbeh II*, Pl. 47, 1005. J, Sounding 3.

13. DT 175. Jar rim and handles. Pale-buff, soft ware; smooth yellowish-buff slip; decorated with painted reddish-orange chevrons and dots. For similar decoration and handles Cf. *Megiddo Tombs*, Pls. 94, 14; 159, 3. Iron I. J, Sounding 3.
14. DT 175. Jar rim. Buff, smooth ware; remnants of buff slip; fairly hard. Iron I. J, Sounding 3.
15. DT 179. Jar rim. Grayish ware, pinkish-buff slip; few white grits; fairly soft. Cf. *Hazor I*, Pl. LIII, 16. J, Sounding 3.

Plate 79

1. 59:6. DT 178. Lamp. Pinkish-buff ware, self slip, soft ware. Cf. *Naṣbeh II*, Pl. 70, 1594; *Sahab*, Fig. 7, 76; *Meqabelein*, Pl. XVII, 5. Iron II. Tomb J 3.
2. 59:5. DT 177. Lamp. Pinkish-buff ware, pinkish slip; some small grits; soft ware. Cf. 79:1. Iron II. Tomb J 3.
3. 58:6 DT 84. Lamp. Pinkish exterior, buff, disk base. Cf. *Naṣbeh II*, Pl. 71, 1635; *Sahab*, Fig. 7, 72. Iron II. Tomb J 3.
4. 58:9. DT 73. Lamp. Pinkish ware, self slip, carbon deposit on pinched lip. Cf. *Naṣbeh II*, Pl. 71, 1627; for lamp types, also *Megiddo I*, Pl. 37. Iron II. Tomb J 3.
5. DT 118. Lamp. Light grayish-cream ware, poorly fired, carbon deposit on lip. For shape Cf. 79:3. Iron II. Tomb J 3.
6. 58:8. DT 85. Lamp. Pinkish ware, medium hard, grits, carbon deposit on lip. Iron II. Tomb J 3.
7. 58:5. DT 83. Lamp. Cream, poorly fired, carbon deposit. Iron II. Tomb J 3.
8. 58:10. DT 72. Lamp. Reddish surface, pock-marked, pinched lip, almost vertical sides with slightly flaring rim. Cf. *Tell Beit Mirsim I*, Pl. 70 (A), 8. Iron II. Tomb J 3.
9. DT 139. Lamp. Reddish, medium heavy ware, grits, carbon deposit. Iron II. Tomb J 3.
10. DT 116. Lamp. Buff-cream ware, grits, poorly fired, carbon deposit. Iron II. Tomb J 3.
11. DT 122. Lamp. Reddish ware, well fired, grits. Cf. *Hazor I*, Pl. LII, 33. Iron II, Tomb J 3.
12. DT 136. Lamp. Reddish ware, heavy, well fired, grits, thick bottom and high base. Cf. *Sahab*, Fig. 7, 72. Iron II. Tomb J 3.
13. DT 134. Lamp. Buff-cream ware, heavy base, grits, carbon deposit. Iron II. Tomb J 3.

5. Plates 80-81: Photographs of Small Objects

Plate 80

1. DT 14. Earring. Bronze. Tomb J 3.
2. DT 21. Finger rings. Large one—iron; small one —bronze. Tomb J 3.
3. DT 29. Beads. Large oblong—carnelian; at its left, carnelian pierced pendant. Tomb J 3.
4. DT 19-1. Earring. Bronze. Tomb J 3.
5. DT 19-2. Earring. Gold. Tomb J 3.
6. DO 154. Glass seal. Cf. Chap. VIII; *PAM* No. 40.184 is described as "Arabic glass weight—Fatimid." DO 154 was attached to large glass piece as broken edges on back indicate, hence, probably not a glass weight. A, I, W. side.
7. DT 36. Beads. Miscellaneous beads, stone and carnelian. Tomb J 3.
8. DT 30. Bead. Carnelian, pierced through length. Tomb J 3.
9. DT 23. Scarab. Soapstone, crudely done, pierced through length; unidentifiable. Tomb J 3.
10. DO 212. Stone. Fine surface as if used as whetstone. D, III, near E. key.
11. DO 120. Arrowhead. Bronze. C, I, Bldg. A, Room 7.
12. DO 135. Stamp. Stone or baked clay. Double stamp, arm joining two ends pierced; geometric designs. Arab. B, I, S. of Wall 1.

Plate 81

1. DO 132. Bar and foot. Bronze. Fragment of rectangular bronze rod, curved at one end with well shaped "foot" attached; the opposite end has rough edges suggesting that it was originally attached to a vessel of some kind. C, II, Bldg. A, Room 4.
2. D 3178-4. Stone. Flint. Damaged on one side. Wt. 6 oz. B, IV, Central area.
3. D 3154-1. Stone. shallow holes (12) seem artificial, as if to decrease weight. Wt. 15 oz. B, IV, Central area.
4. D 3226-1. Stone. Almost rectangular in shape. Wt. 12 oz. C, IV, Between Walls 10 and 12.
5. D 3226-2. Stone. Slight indentations on two opposite flat surfaces suggest a hand hammer. Wt. 19 oz. C, IV, Between Walls 10 and 12.
6. DO 216. Stone mold. Limestone; two half-cylinder indentations on each side; mold irregularly shaped, found with silver fragments; thickness —2.5 cm. average. D, III, near E. key.
7. (From top to bottom):
   DO 176. Shell. Pierced. B, I, Bldg. A, between floors 1 and 2.
   3123-5. Shell. Pierced. B, I, S. of Wall 10.
   DO 191. Bead. Stone. A, II, sect. a.
   DO 165. Bead. Stone, polished agate(?), pierced in center. B, I, Bldg. A, between floors 1 and 2.
   DO 198. Spindle whorl. B, II, Beneath flagstones of floor 2.
   DO 185. Bead. D, I, S. of Wall 12.
   DO 141. Shell. Mother of pearl, cut as for large setting of pendant. C, Room 4, floor.
   DT 37. Pendant. Diorite, heavy, horn-shaped, smooth, highly polished, pierced across small end, black. Tomb J 3.
8. (From top to bottom):
   DO 220-1. Blade. Iron, short blade, two brads in shaft. D, III, Between Walls 10 and 12.
   DO 220-2, 220-3 and 220-4. Iron brads, tips bent so as to parallel top surface. D, III, Between Walls 10 and 12.

DO 220-5. Bronze brace. Flat pieces on each side of circular opening are pierced by a single hole. D, III, Between Walls 10 and 12.

DO 220-6. Iron nail. Head pierced. D, III, Between Walls 10 and 12.

9. (From top to bottom):

LO 107. Blade. Bronze, fragmentary. C, I, Between Rooms 6 and 7.

DO 210. Arrowhead. Bronze, corroded. D, III, S. of Wall 12.

DO 207. Spearhead. Iron, fragmentary. B, I, S. Wall 10.

DO 218-1. Nail. Iron, heavy, corroded. E, III, E. side.

DO 218-2. Nail. Iron. E, III, E. side.

DO 170. Hook. Iron, fragmentary. A, II, Sect. a.

10. DO 214. Pendant. Bone, broken on both ends but part of hole remains at left (top); three incised lines around pendant at top and bottom; four rows of incised dots (three in each) each enclosed in a circle. Cf. *Tell Beit Mirsim III*, Pl. 64, 9. *Naṣbeh I*, Pl. 112, 30; *Lachish III*, Pl. 37, 19. B, II, S. of Wall 10, in floor foundation.
11. DO 123. Pendant (?). Bone, complete, inscribed on top with eight dots, each enclosed in a circle, and on bottom with eight dots, each enclosed in a circle, pierced with one hole, thickness—.65 cm. B, I, Bldg. A, Room 4.
12. DO 173. Pin. Bone, point broken. B, I, from Wall of Room 1.
13. DO 146. Pin. Bronze, engraved on one end. Cf. *Naṣbeh I*, Pl. 105, 15. C, I, Room 4.
14. DO 172. Pin. Bronze, engraved on one end. B, I, from Bldg. A, dismantling of Wall 3.
15. DO 152. Pin. Bronze, engraved like 81:13 and 14 on end, probably straight originally. B, I, Bldg. A.
16. DT 93. Earring. Bronze. Pointed ends overlapping. J, Sounding 3, Grave 7.
17. DO 223. Finger ring. Bronze. Ends touch. E, II, S. of Wall 11, near W. key.
18. DO 108a. Finger ring. Bronze. Complete circlet, thicker on one side. A, I, sect. A.
19. DO 108. Buckle. Bronze; slight opening in center. B, I, Bldg. A, from Wall 3.
20. DO 124. Finger ring. Bronze. B, I, Bldg. A, Room 4.
21. DT 8. Bracelet. Bronze; for small child. Tomb J 3.
22. DT 4. Bracelet. Bronze. Tomb J 3.

6. Plate 82: Photographs of Coins

1. DO 103. Jewish coin under Nero; year 5 of Nero, A. D. 58-9. C, I, NE. corner.
2. DO 213. Roman. Domitian (A. D. 81-96). Probably Roman imperial, *i. e.*, not local issue. B, I, Bldg. A near Wall 7.
3. DO 104. Roman. Elagabalus (A. D. 218-222). Arabia. Medeba. C, I, Bldg. A, NE. corner.
4. DO 186. Roman. Diocletian (283-305). Phoenicia. Tripolis. A, II-III, W. side.
5. DO 131. Roman. Julia Domna, wife of Septimius Severus (A. D. 193-211). Arabia. Petra. C, II, Room 4.
6. DO 144. Roman. Constantine I (A. D. 306-337). C, I, Bldg. A, Room 4, floor.
7. DO 227. Nabataean. King of Nabataea, apparently Rabbel II (A. D. 71-106). B, III, steps leading into city.
8. DO 203. Byzantine. Justin I (A. D. 518-527). Constantinople. C, II-III, N. of Wall 12.
9. DO 160. Byzantine. Justin I. (A. D. 518-527). Constantinople(?). B, I, Bldg. A, between floors 1 and 2.
10. DO 159. Byzantine. Justin II (A. D. 565-578). Antioch. B, I, Bldg. A, between floors 1 and 2.
11. DO 129. Arabic. Ayyūbid dirhem. Al-'Ādil and heir designate al-Kāmil. Mint (Cairo) and date (*ca.* 600 A. H. = A. D. 1203-04) effaced. Location uncertain.
12. DO 106. Arabic. 'Abbāsid. Al-Mā'mūn Iṣbahān. (199 A. H. = A. D. 814-15). B, I, Bldg. A, Room 1. NE. corner.
13. DO 133. Arabic. Ayyūbid fals. Al-Kāmil Muḥammad (615-635 A. H. = A. D. 1218-1238). Mint and date effaced. B, I, Bldg. A, floor of SW. corner.
14. DO 145. Arabic. Ayyūbid dirhem. Al-'Ādil (592-615 A. H. = (A. D. 1196-1218). Mint and date effaced, probably Damascus. C, I, Bldg. A, Room 4, floor.
15. DO 162. Arabic. Umayyad fals. No mint, no date. (*Ca.* 100 A. H. = A. D. 718-719). B, I, Bldg. A, between floors 1 and 2.

7. Plate 83: Photographs of Inscriptions

1. DS 56. Inscribed stone. Dimensions: Maximum ht. — 56 cm.; maximum width—27 cm.; maximum thickness—9 cm. Stone is crudely chiseled; surface is smooth only on inscribed side. Stone was brought to the camp by Muhamet Hamdan, a resident of Dhībân and one of the excavation laborers. He reported that he had seen others like it near tombs E. of Dhībân.
2. DS 52. Inscribed stone. Dimensions: Ht.—42 cm.; length—58 cm.; thickness at bottom—44 cm.; thickness at top right—20 cm. Traces of inscribed single line frame at bottom and at left; impossible to determine original shape of the stone; inscription continued at right. B, I, SE. corner.

PLATE 26:1 General view of Southeast corner of *tell*, looking west; camp located on "saddle" approach from south.

2 General view of northeast corner of *tell*, looking west; Wâdī Dhībân at right of Bedouin tent.

PLATE 27:1 Staff: (standing l. to r.) Messrs, Hasan Abu Awad, Christaki, Albina, Abdo, Reed; (seated l. to r.) Pedrette, Van Beek, Broome, Tushingham.
2 Pay day for workmen and boys from Dhībân; Reed and Hasan at table.

PLATE 28:1 General view of southeast corner of *tell*, looking north.
2 Aerial view, looking west; Wâdī Dhībân circles *tell* at north and west; excavations and reservoir near center; east-west track separates *tell* from modern village at left.

PLATE 29:1 Harvesting grain in Moabite fields near Dhībân.
2 Restoring pottery at camp (l. to r.) Imran and Hasan.

PLATE 30:1 Rooms of Arab house, Building A, viewed from West.
2 Room 4, Area C. Building A, collapsed stone roof.

PLATE 31:1 General views of Areas B and C from southwest; Building A.
2 Junction of Walls 1 and 6, Building A; oven in floor with bin at its right and above.

PLATE 32:1 Room 4, Area C, from south; dirt floor after removal of collapsed roof; doorway at left.
2 Room 2, Area B, from south; reused capital in pier, storage bin at right.

PLATE 33:1 Area B, from north; exposed portion of drain.
2 Area B, from south; covered portion of drain.

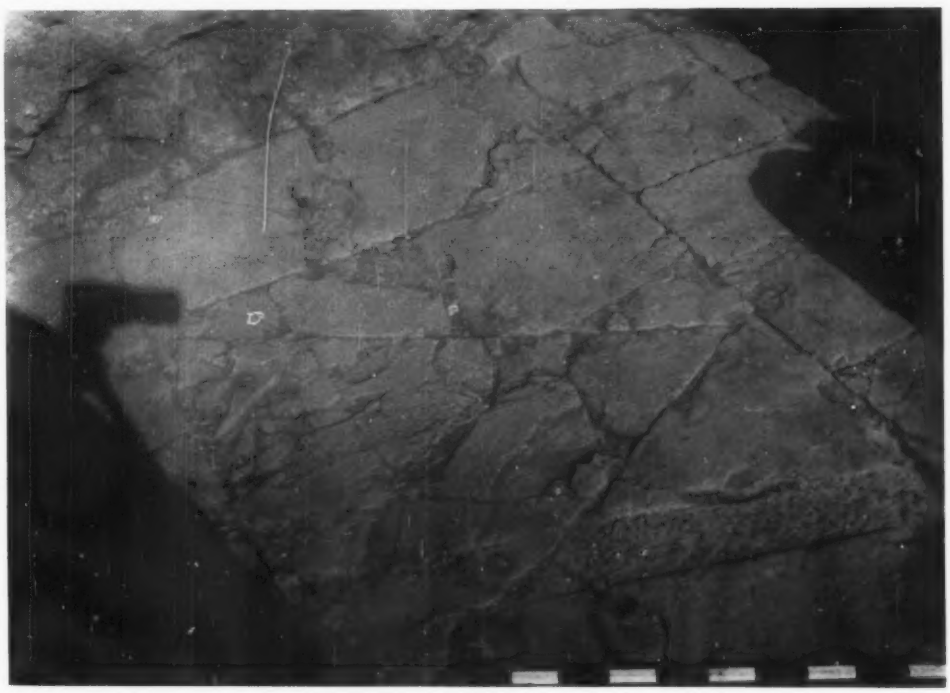


PLATE 34:1 Northwest corner and flagstone floor 1 of Building A, Area B.
2 Flagstone floor north of Wall 1, from west, shallow drain, Area B.

PLATE 35:1 Wall 2, two doorways, floor 1, Building A, from west, Area B.
2 Oven in floor 1, Building A, Area B.

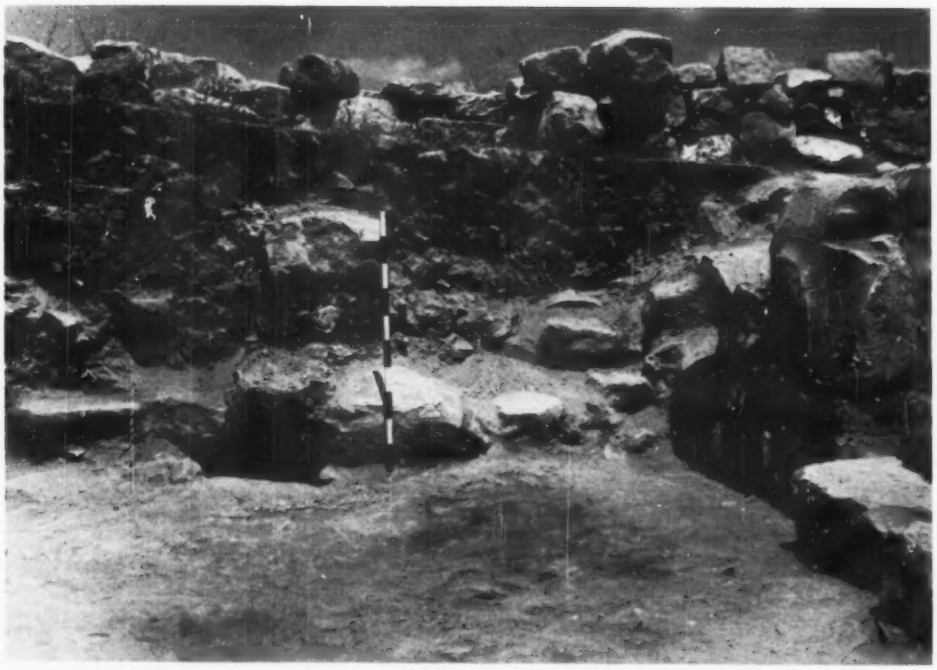


PLATE 36:1 Room 5, cistern shaft, doorway at right, from south, Area C.
2 Walls of Rooms 5 and 6,, Building A, from east, Area C.

PLATE 37:1 Floors 1 and 2, Building A, from east, Area B.
2 Floor 2, pier bases abutting Wall 1, from southeast, Area B.

PLATE 38:1 Pier between Rooms 2 and 3, Building A, reused capital, Area B.
2 Reused pedestal stone (DS 55), north of Wall 10, from west., Area C.

39:1 Reused pedestal stone (DS 55), from east, Area C.
2 Reused pedestal stone (DS 55), same as above, removed from wall and turned over.

40:1 Stone steps (DS 54), Nabataean stone dressing, plastered, east side of Area A.
2 Reused stone base (DS 53) in foundation of Wall 3, Building A, Nabataean stone dressing.

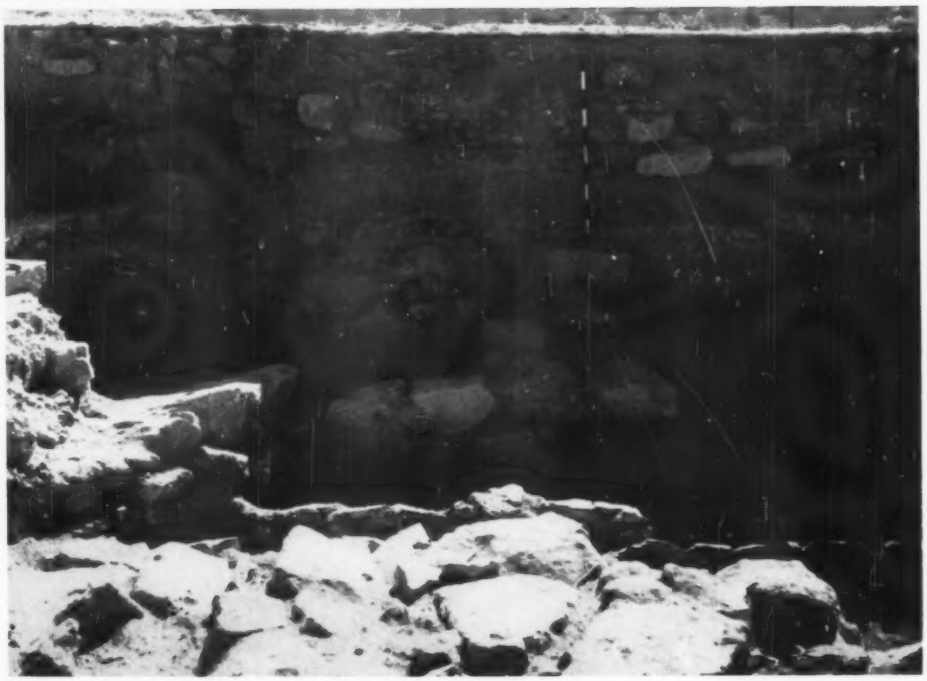
41:1 West part of Nabataean wall lower right, superimposed Arab and Byzantine walls, Area A, from south.
2 Top of Nabataean wall, Area A, from south.

42:1 Top of Nabataean wall, concealed at bottom by wall of aqueduct, Area A, from south.
2 Arches in lower part of aqueduct, stones of ramp at left, Area A, from south.

43:1 Nabataean wall, upper right; aqueduct, lower right; ramp into city from south, Area A.
2 Arches of aqueduct wall, from south, Area A.

44:1 Steps of Nabataean "Gateway" at right, partially covered by later walls, Area E from west.
2 Steps of Nabataean "Gateway," partially covered by Walls 12 and 13, Area B from west.

45:1 Nabataean steps and platform after removal of later walls, Area B from south.
2 Nabataean pavement, Wall 10 at top, Area B from south.



46:1 Wall 12 from north; foundations of earlier walls at left rest on bedrock; Areas C and D.
2 East balk of Area B from west; drain at bottom.

47:1 Mud-brick wall at left, from southwest, Area B.
2 Mud-brick wall preserved by fill used to level area for flagstone floor at upper right, from southeast, Area B.

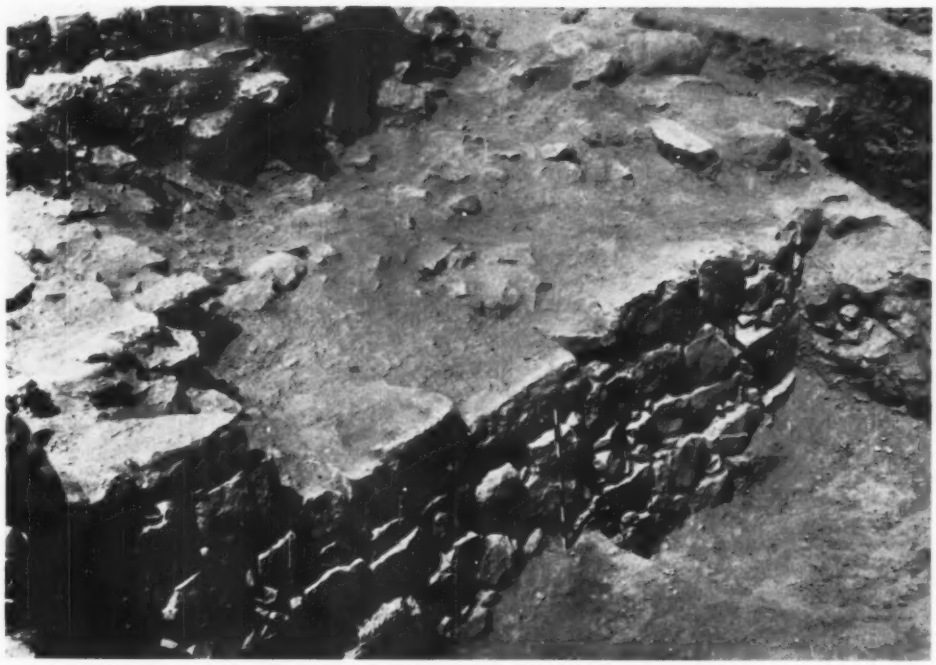


PLATE 48:1 Wall 12 from east, Areas C and D.
2 Wall 12 from southwest, Areas C and D.

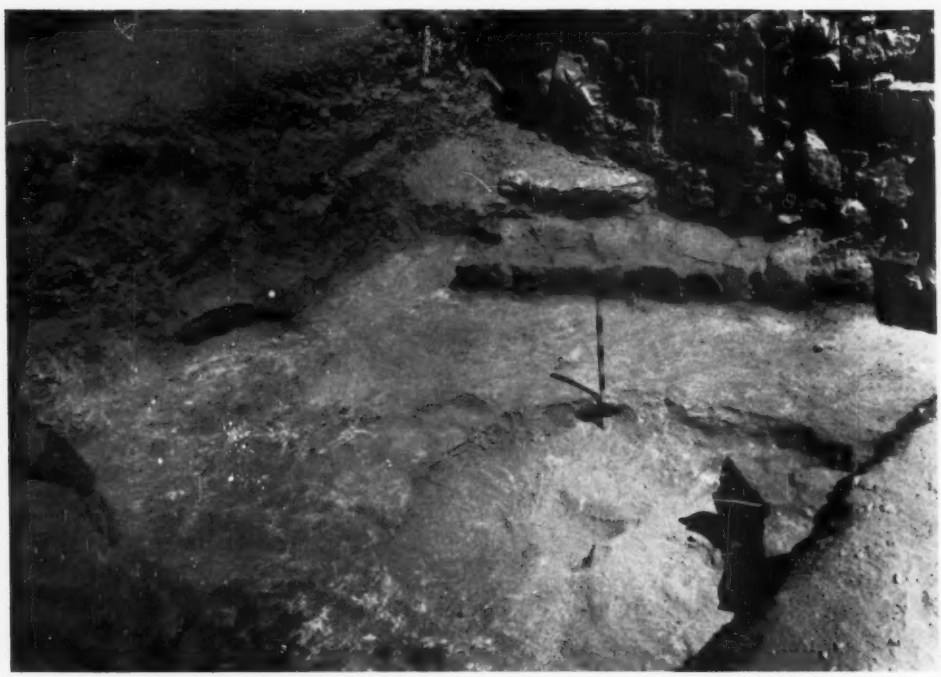


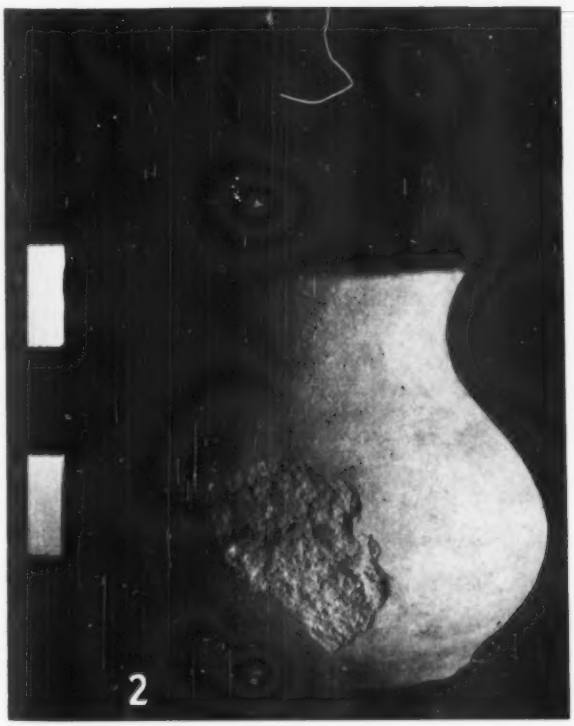
PLATE 49:1 Wall 7 from east, Area B.
2 Earliest walls resting on bedrock, Area C.

PLATE 50:1 Walls 30 and 31 on bedrock, and oven from southeast, Area C.
2 Oven and cooking pot; bin for grain at right, Area C.

PLATE 51:1 Tomb area east of city on south bank of Wâdī Dhībân.
2 Entrance to Tomb J3.

PLATE 52:1 Entrance to Tomb J3 from inside.
2 View of Tomb J3 before clearing.

PLATE 53:1 Upper portion of coffin lid, Tomb J3.
2 Terra-cotta coffin on floor of Tomb J3.



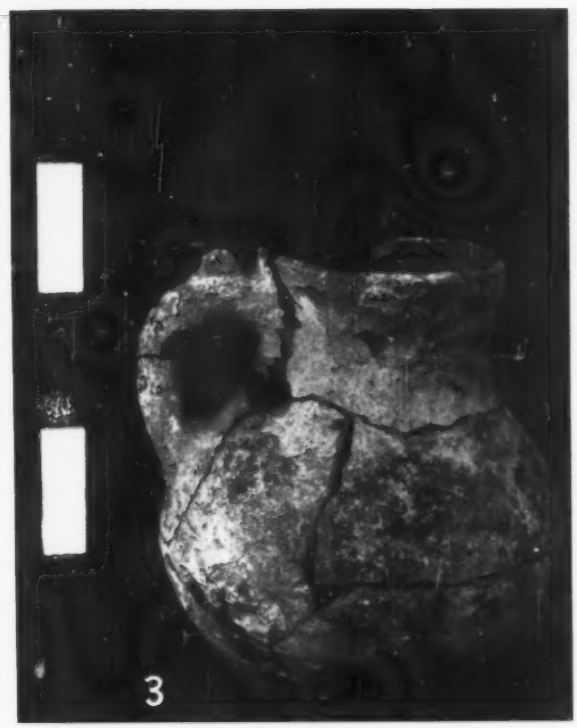
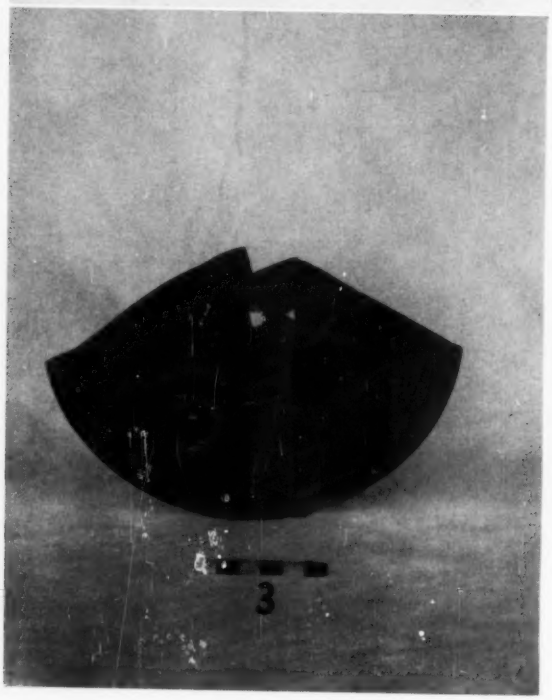


PLATE 54 Arab pottery: pitchers and jar.



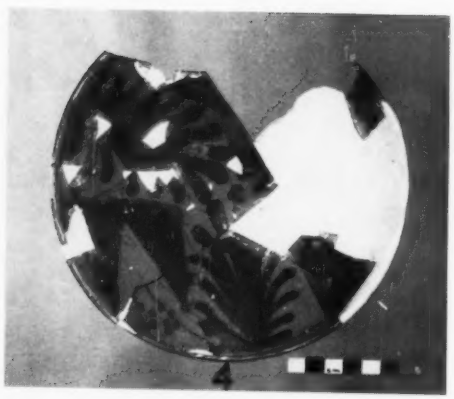
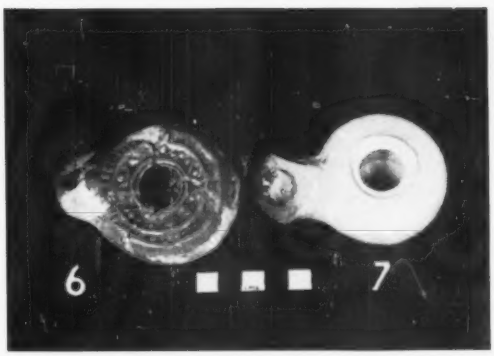


PLATE 55 Nabataean decorated bowls.



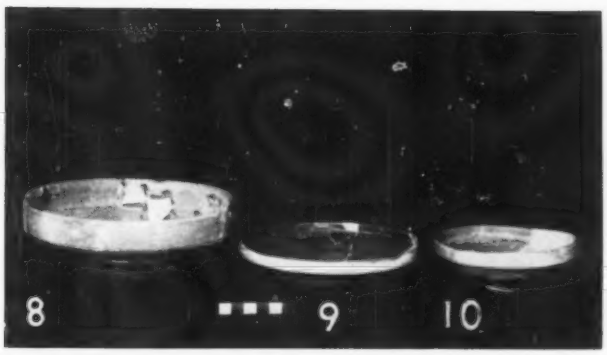


PLATE 56 Nabataean-Roman pottery: pitchers, jar, bowls and lamps.

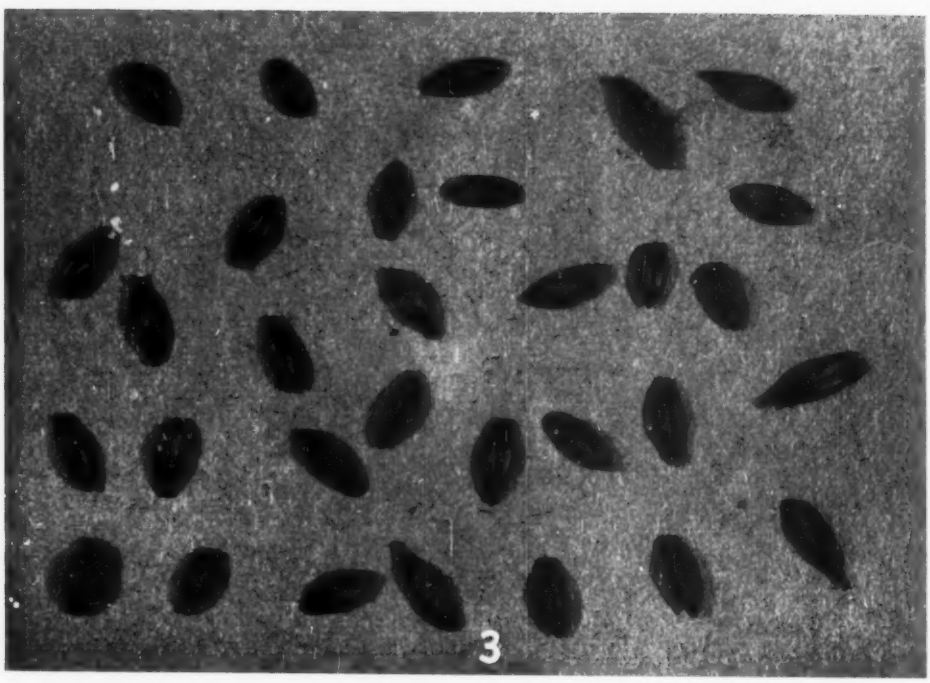


PLATE 57 Iron II jars and grain

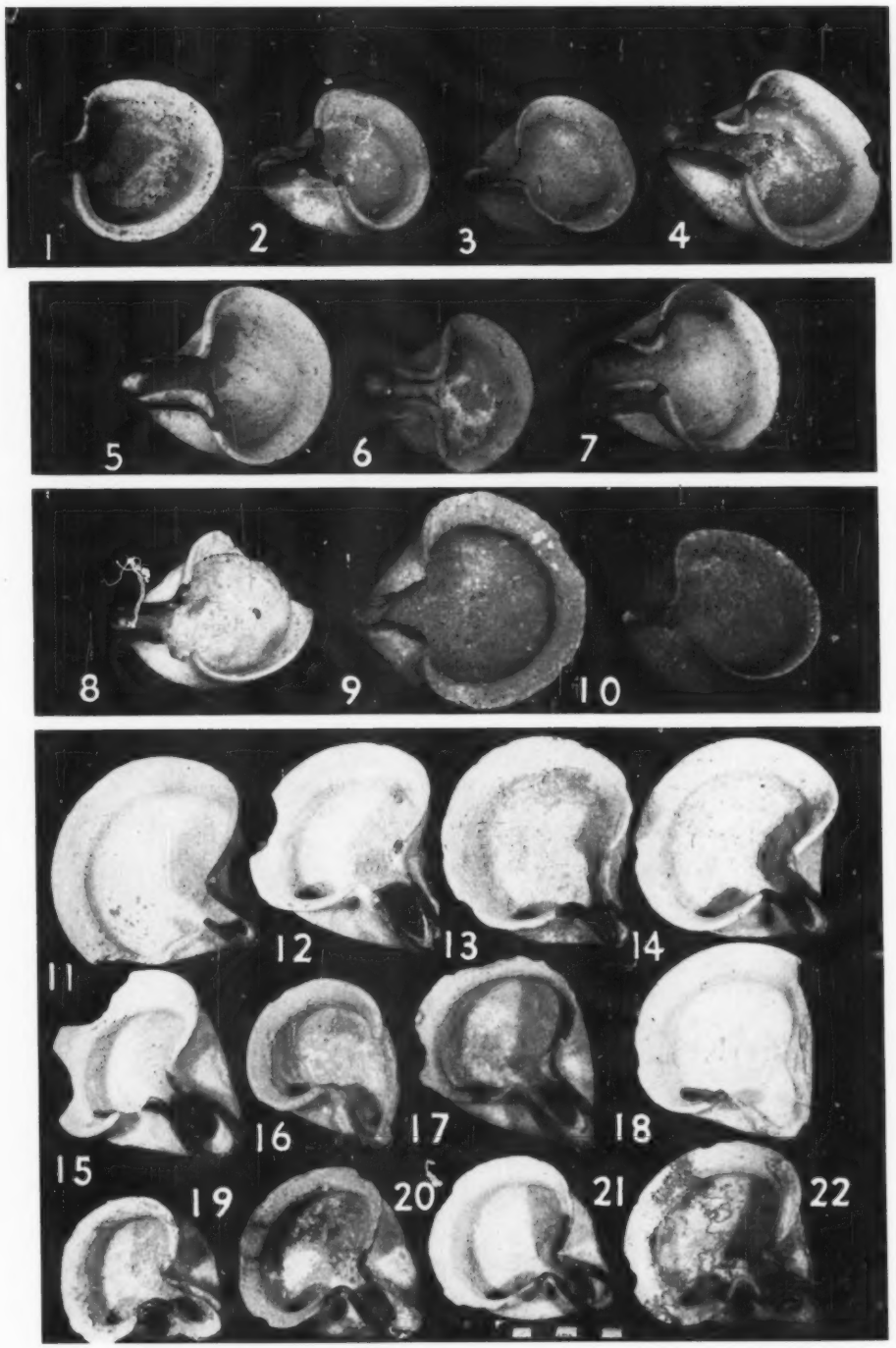
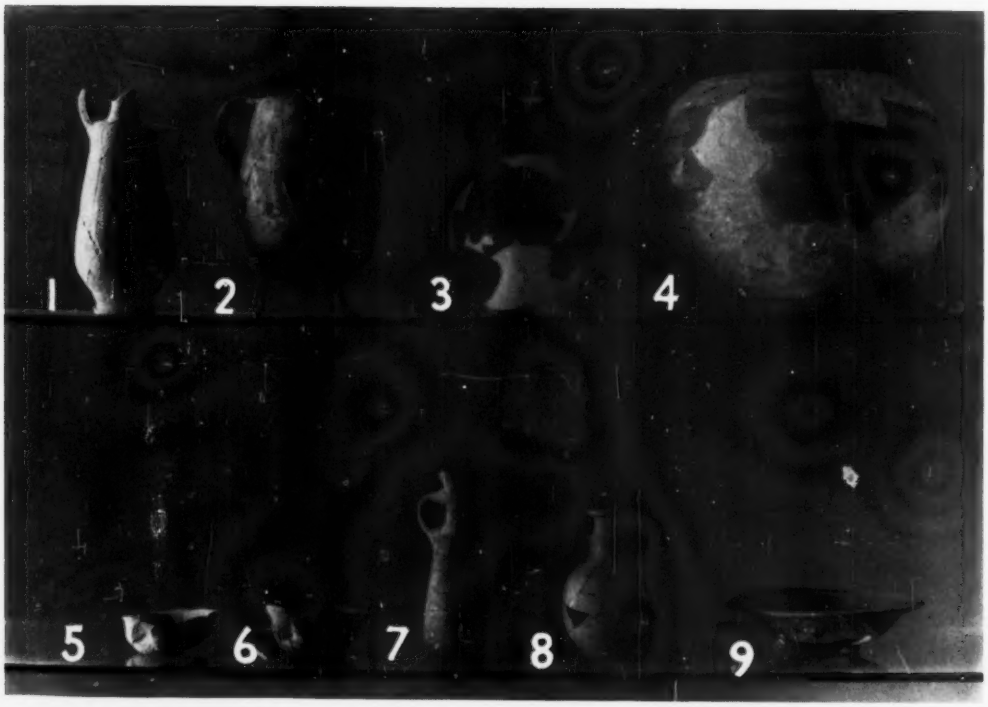


PLATE 58 Iron II lamps from Tomb J3.



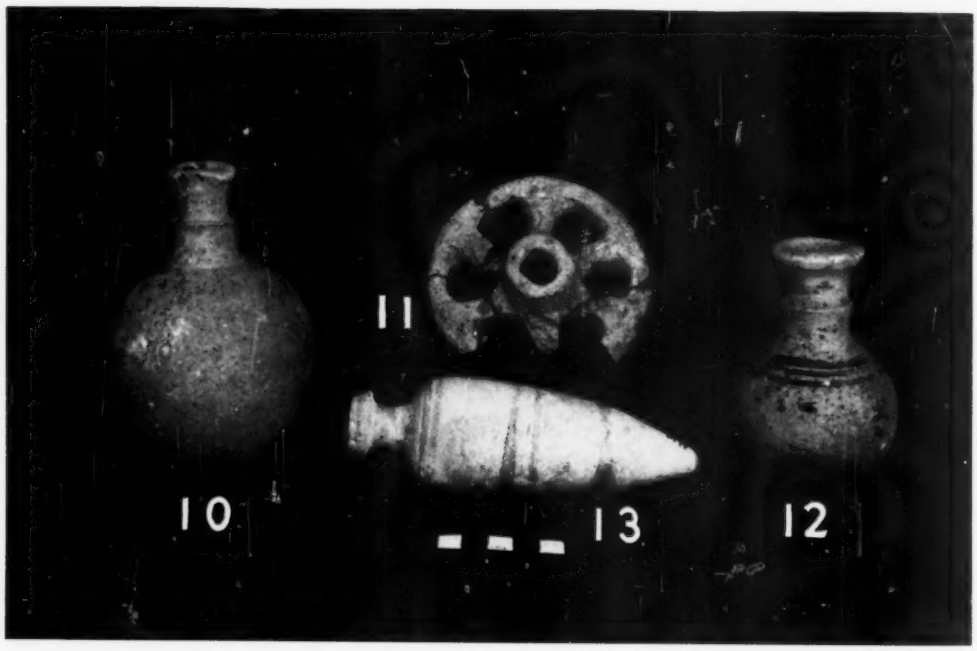


PLATE 59 Miscellaneous pottery vessels.

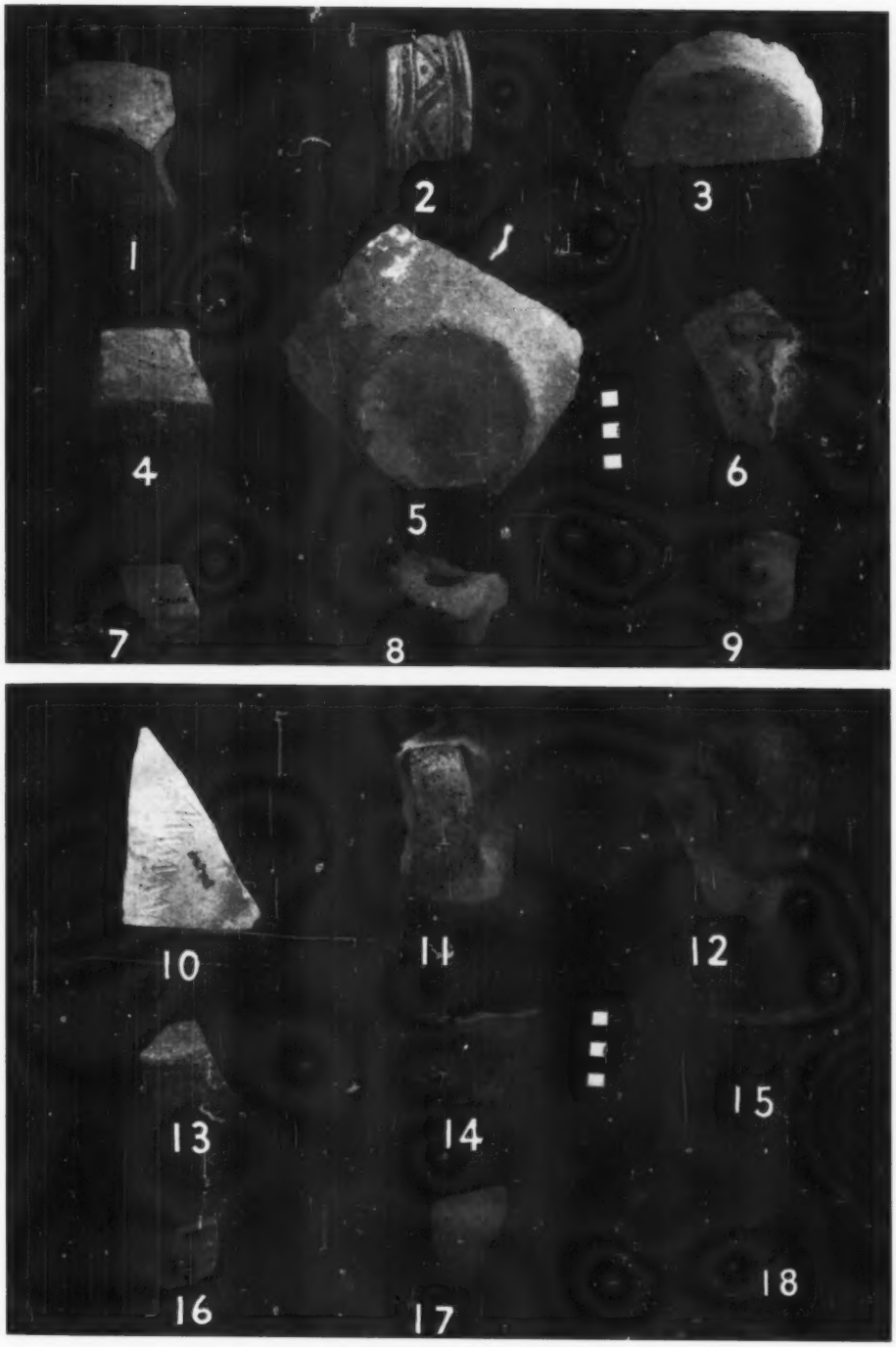


PLATE 60 Arab-Byzantine pottery fragments.

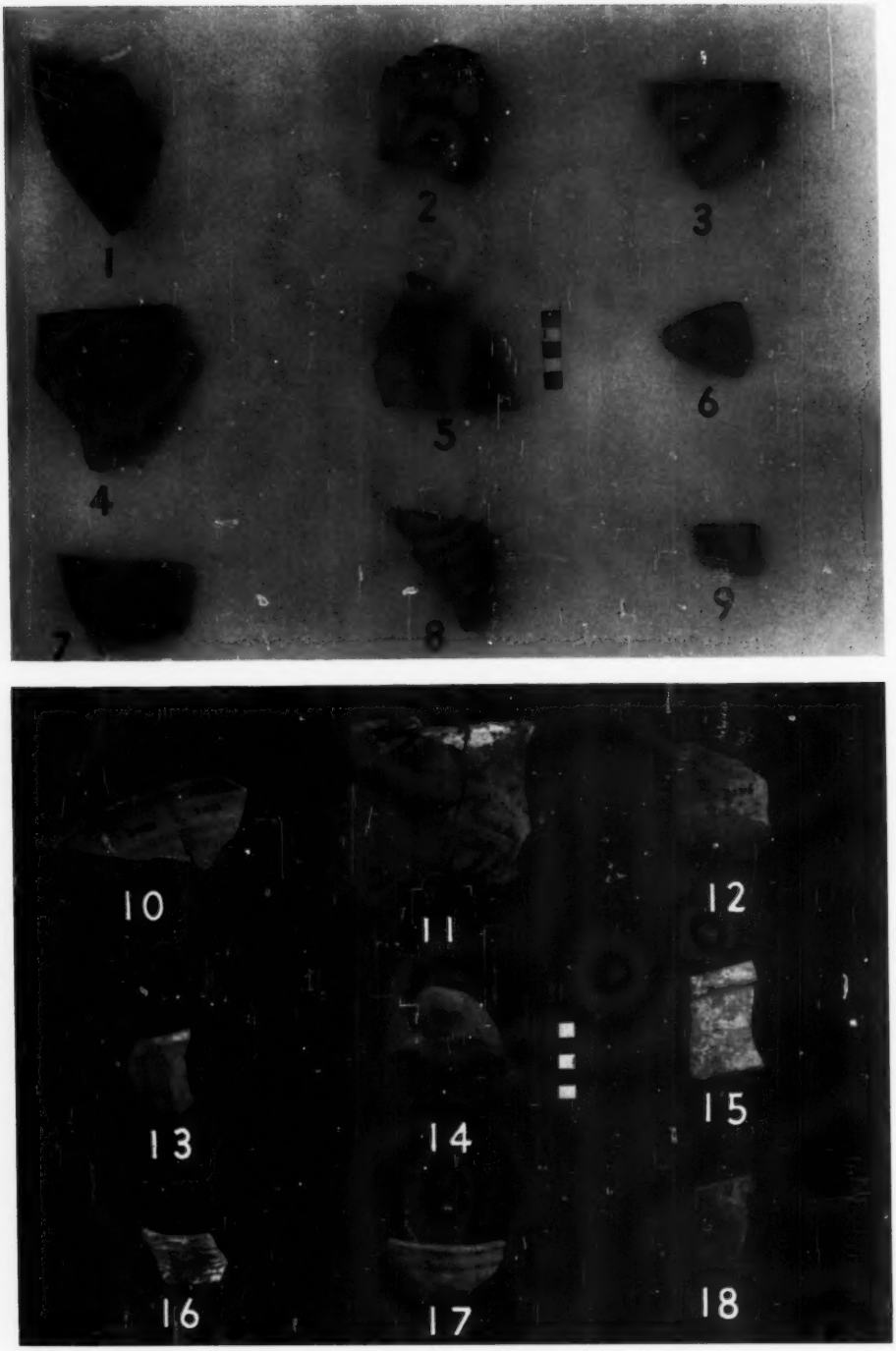
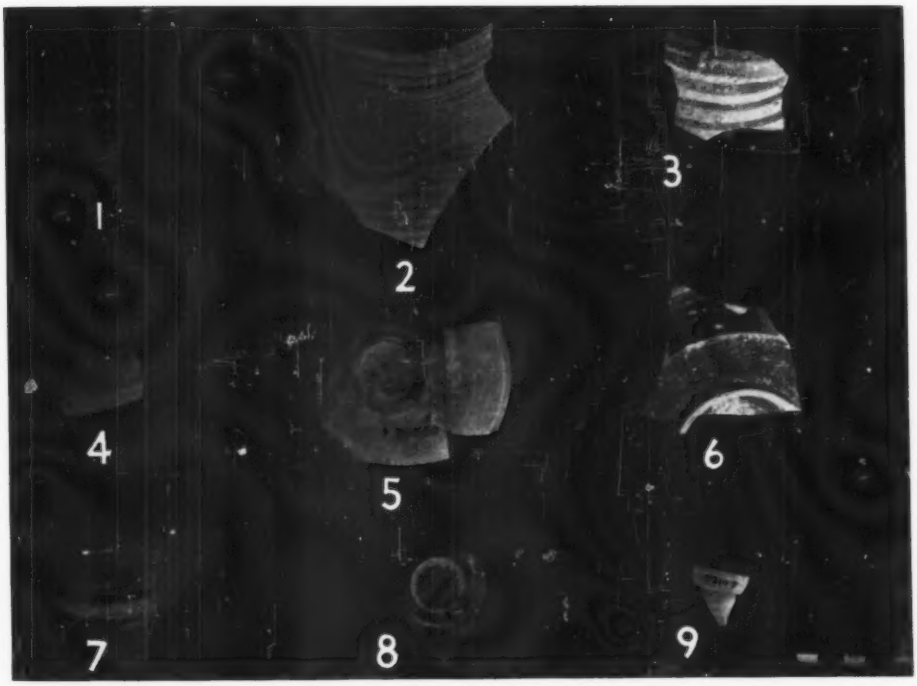


PLATE 61 Arab-Byzantine pottery fragments.



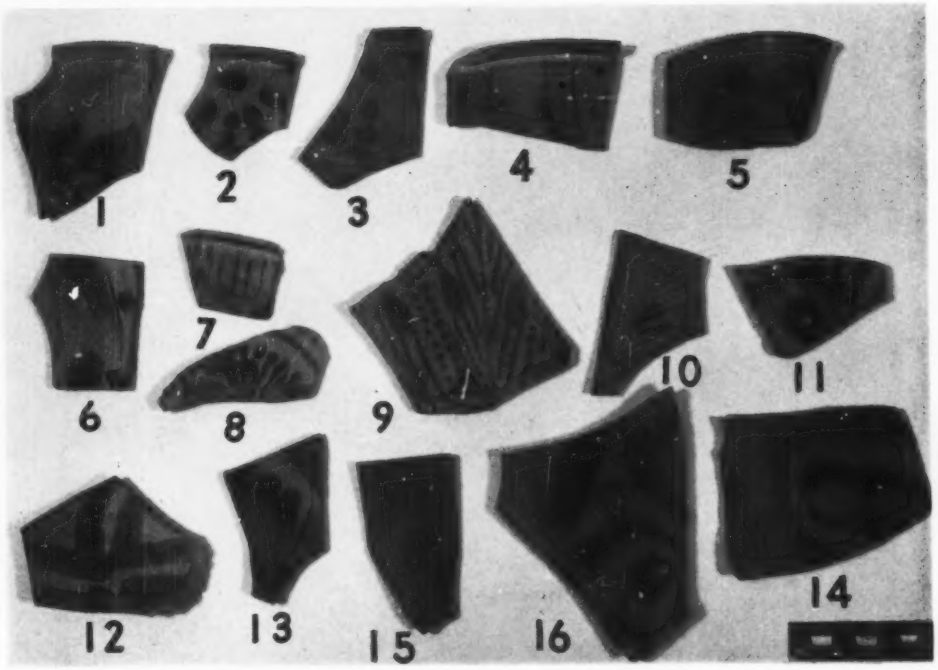


PLATE 62: A. Bases and rims.
B. Nabataean decorated pottery fragments.

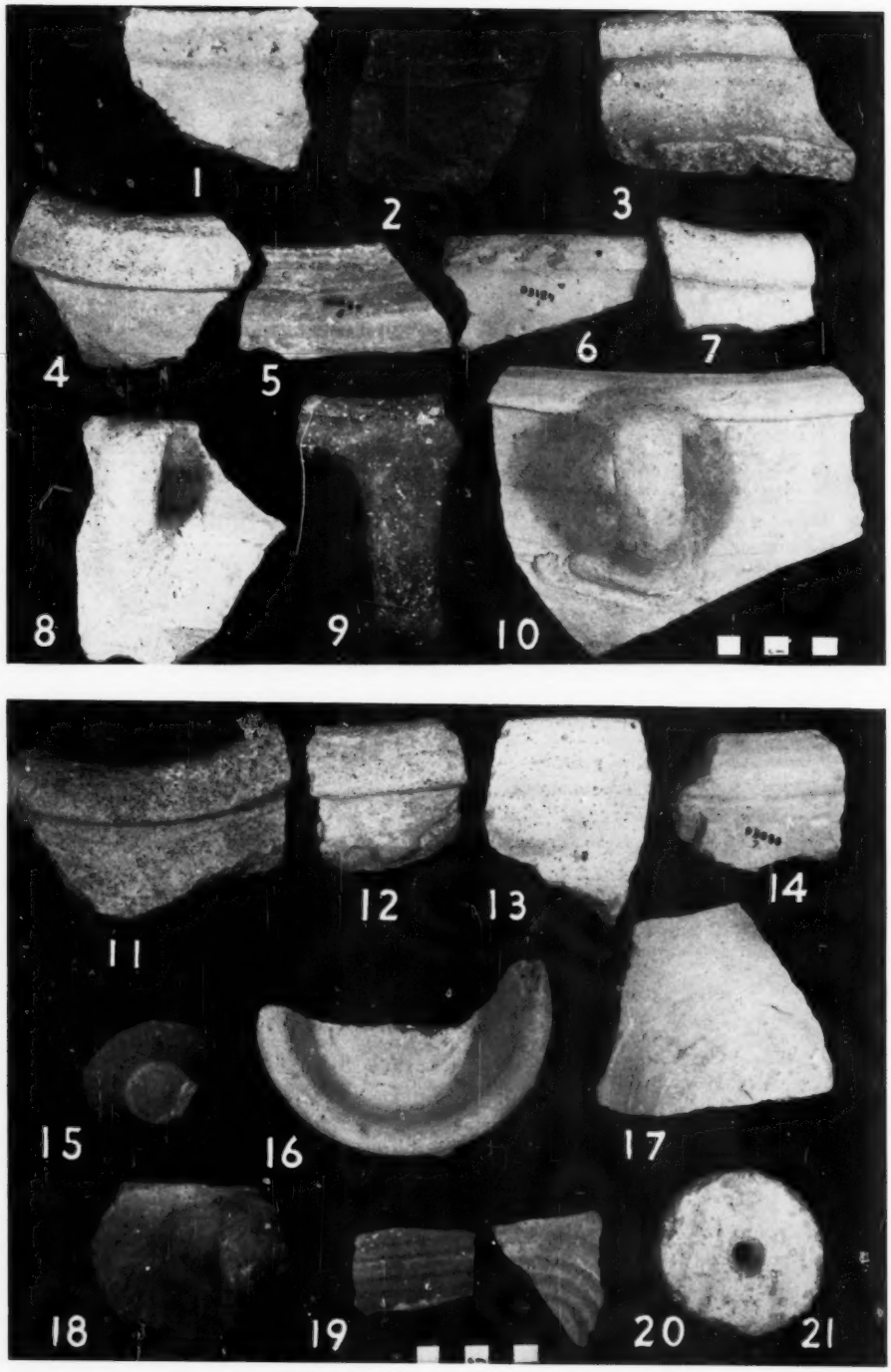


PLATE 63 Iron II pottery fragments.

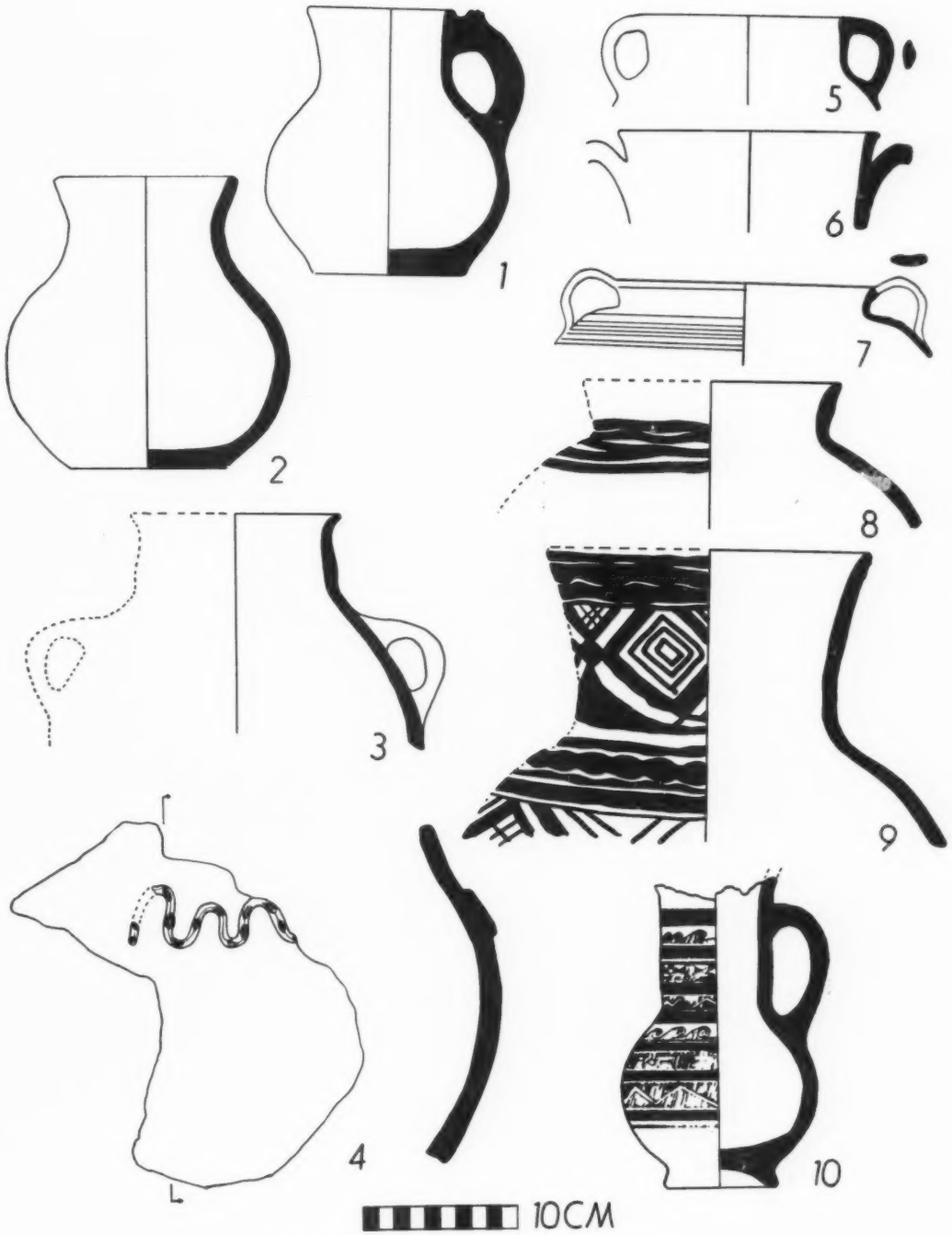


PLATE 64 Pottery drawings, Arab jars and pitcher.

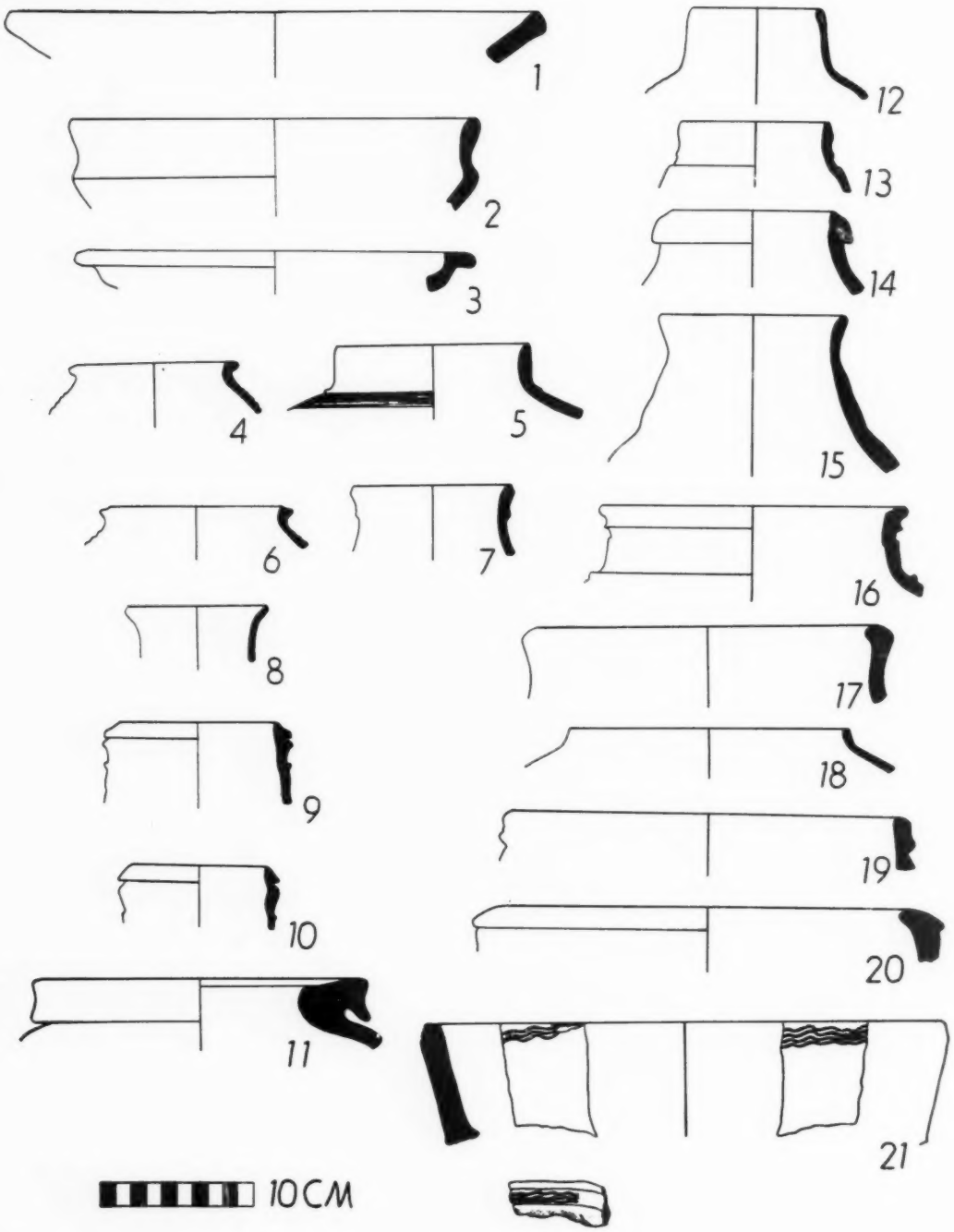


PLATE 65 Pottery drawings, rims.

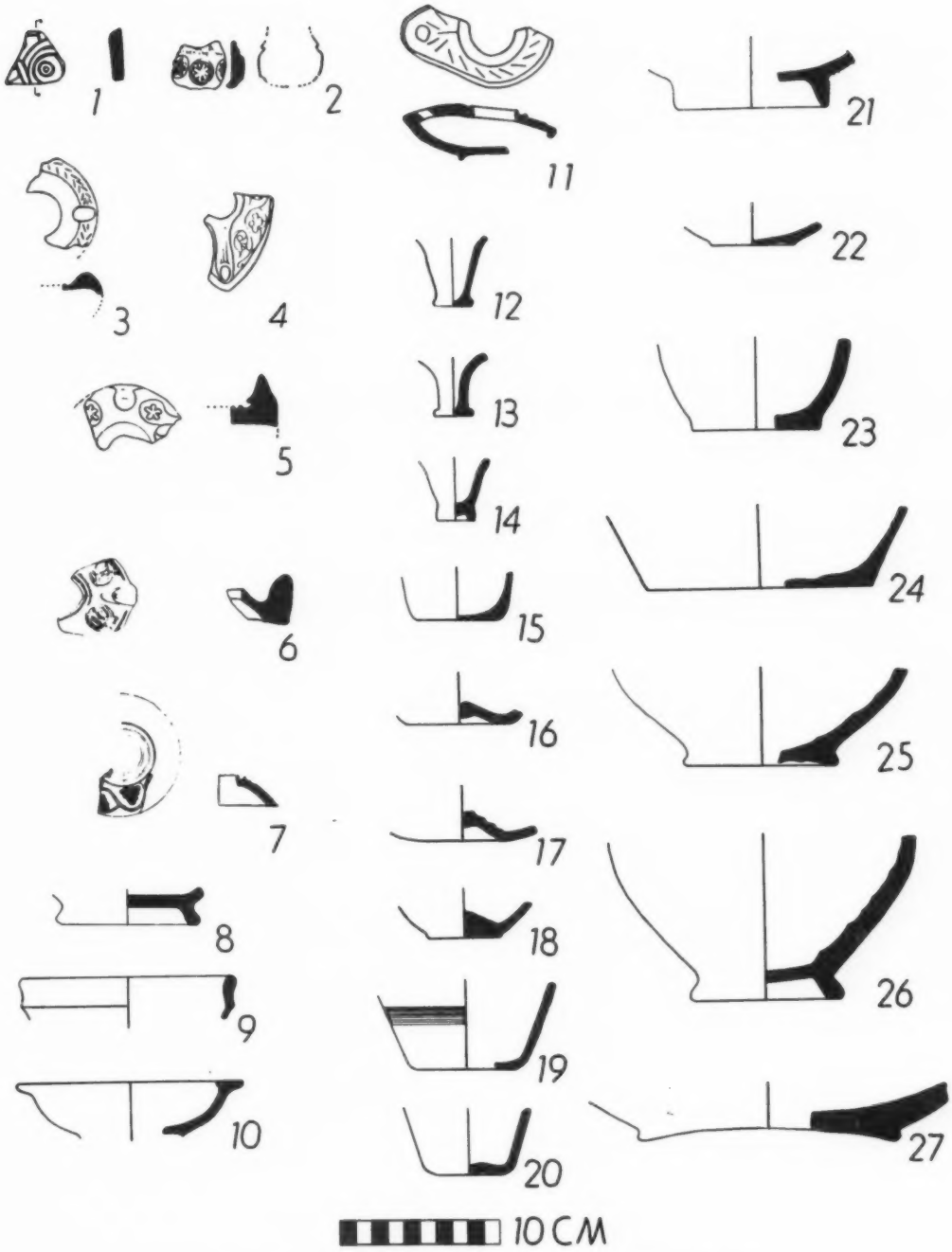


PLATE 66 Pottery drawings, lamp fragments, bases, and rims.

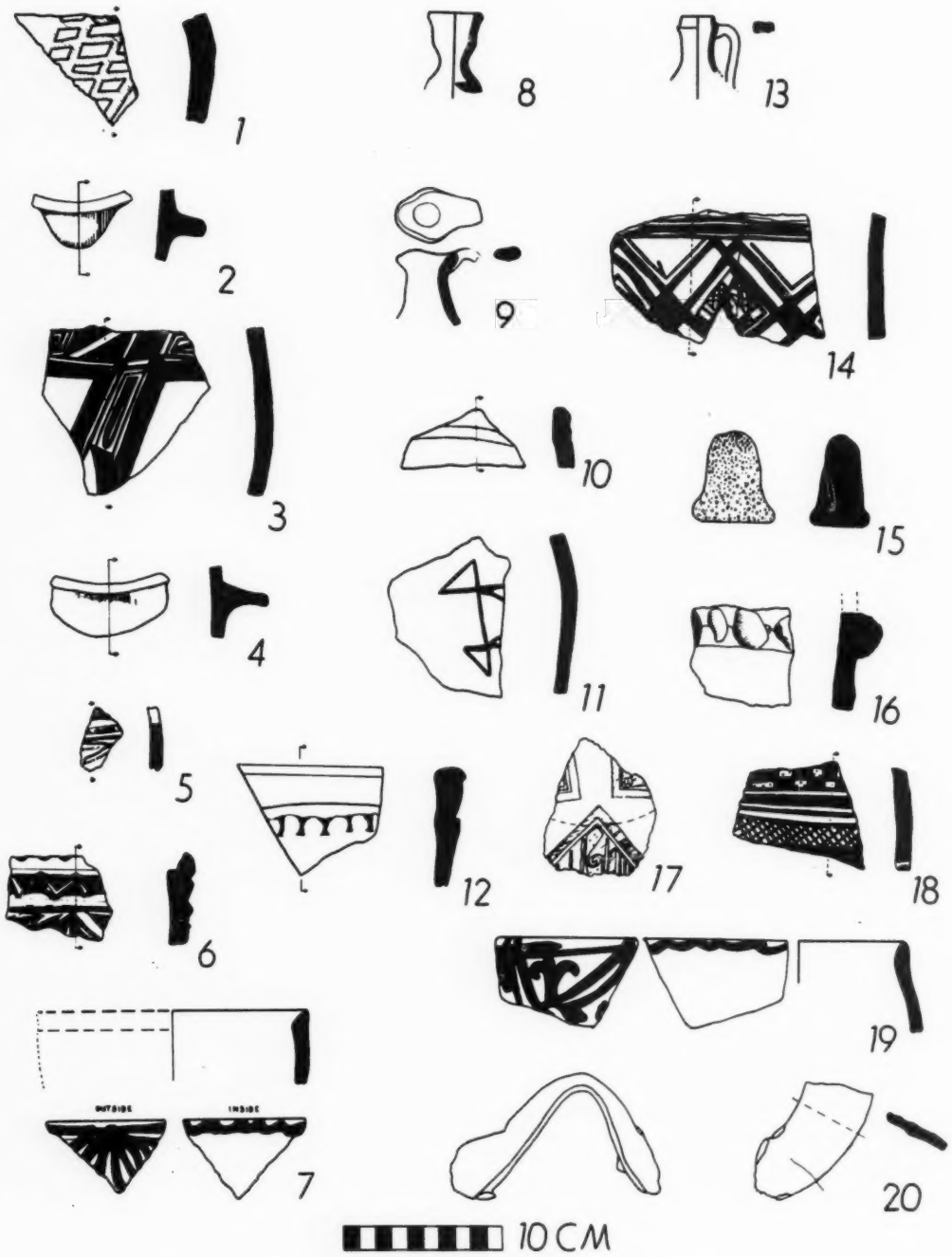


PLATE 67 Pottery drawings, decorated Arab and miscellaneous pottery fragments.

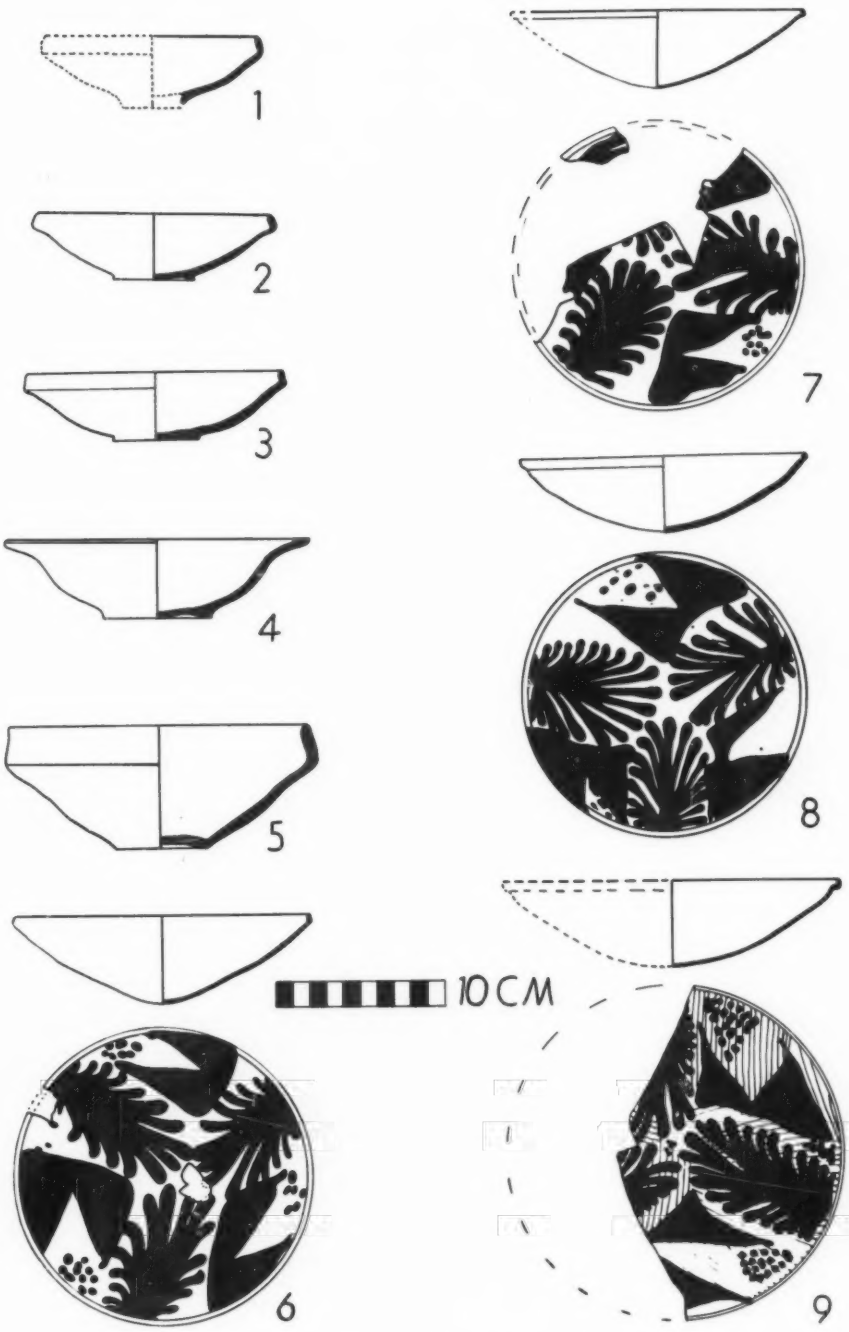


PLATE 68 Pottery drawings, Nabataean bowls.

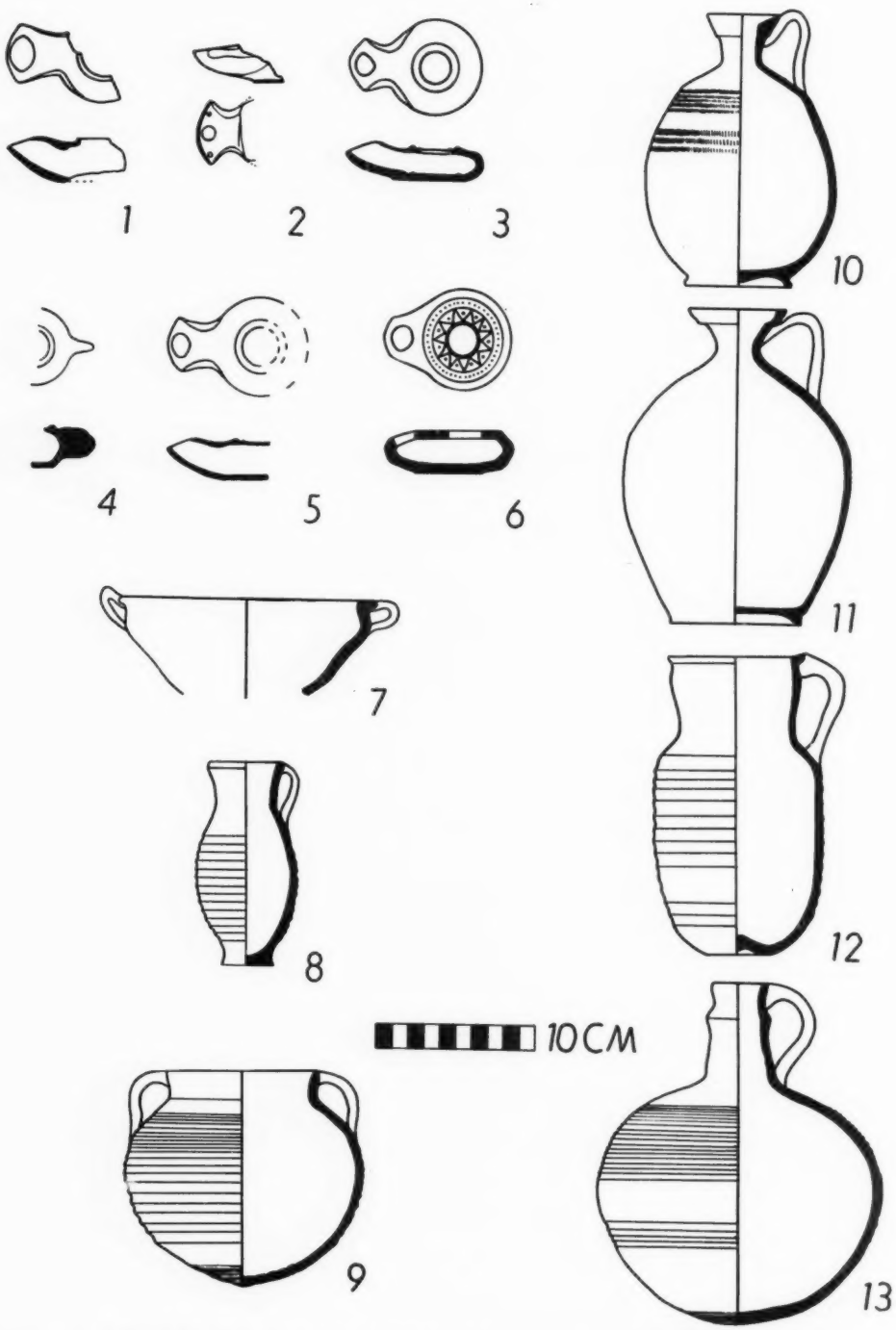


PLATE 69 Pottery drawings, Nabataean-Roman lamps, pitchers, and bowls.

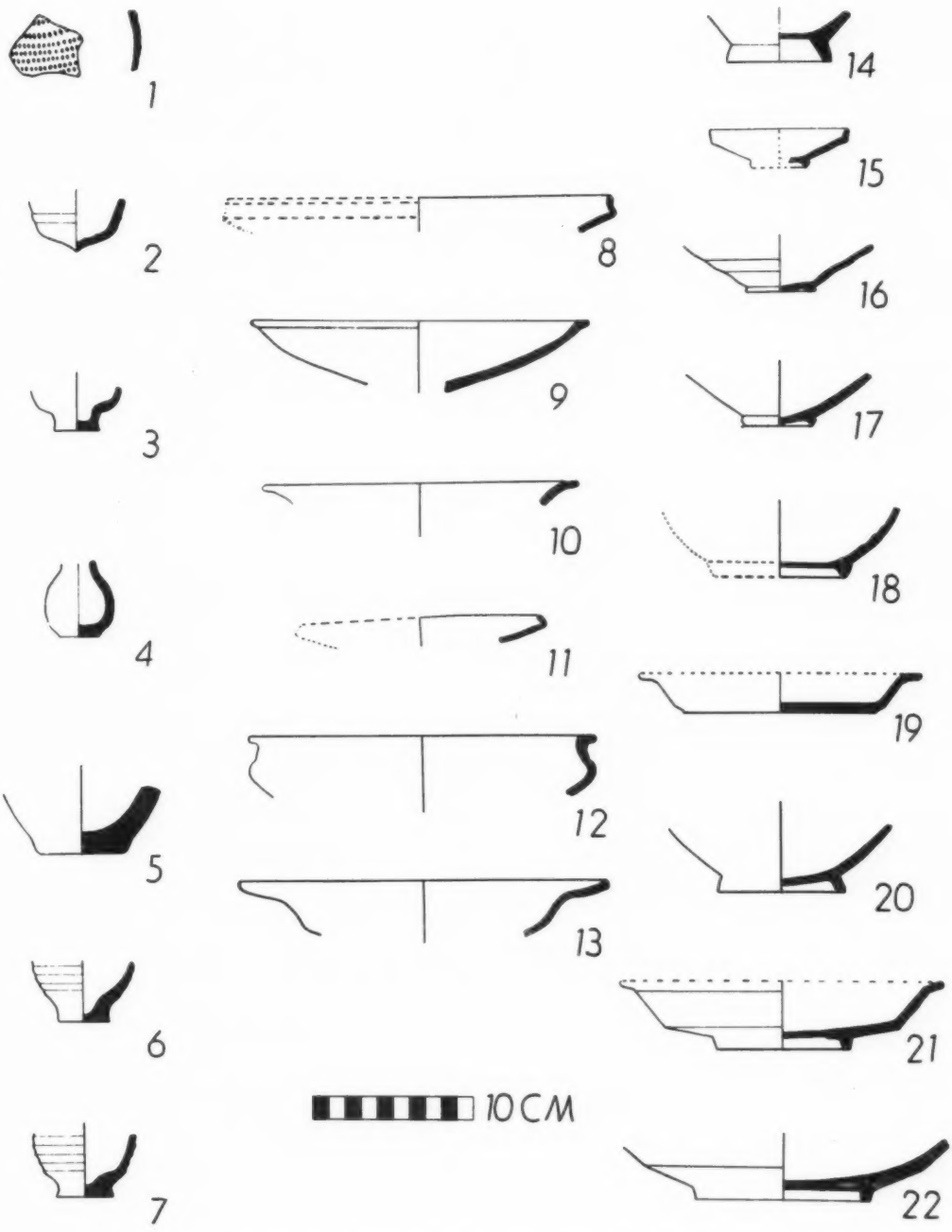


PLATE 70 Pottery drawings, rims, bases, and bowls.

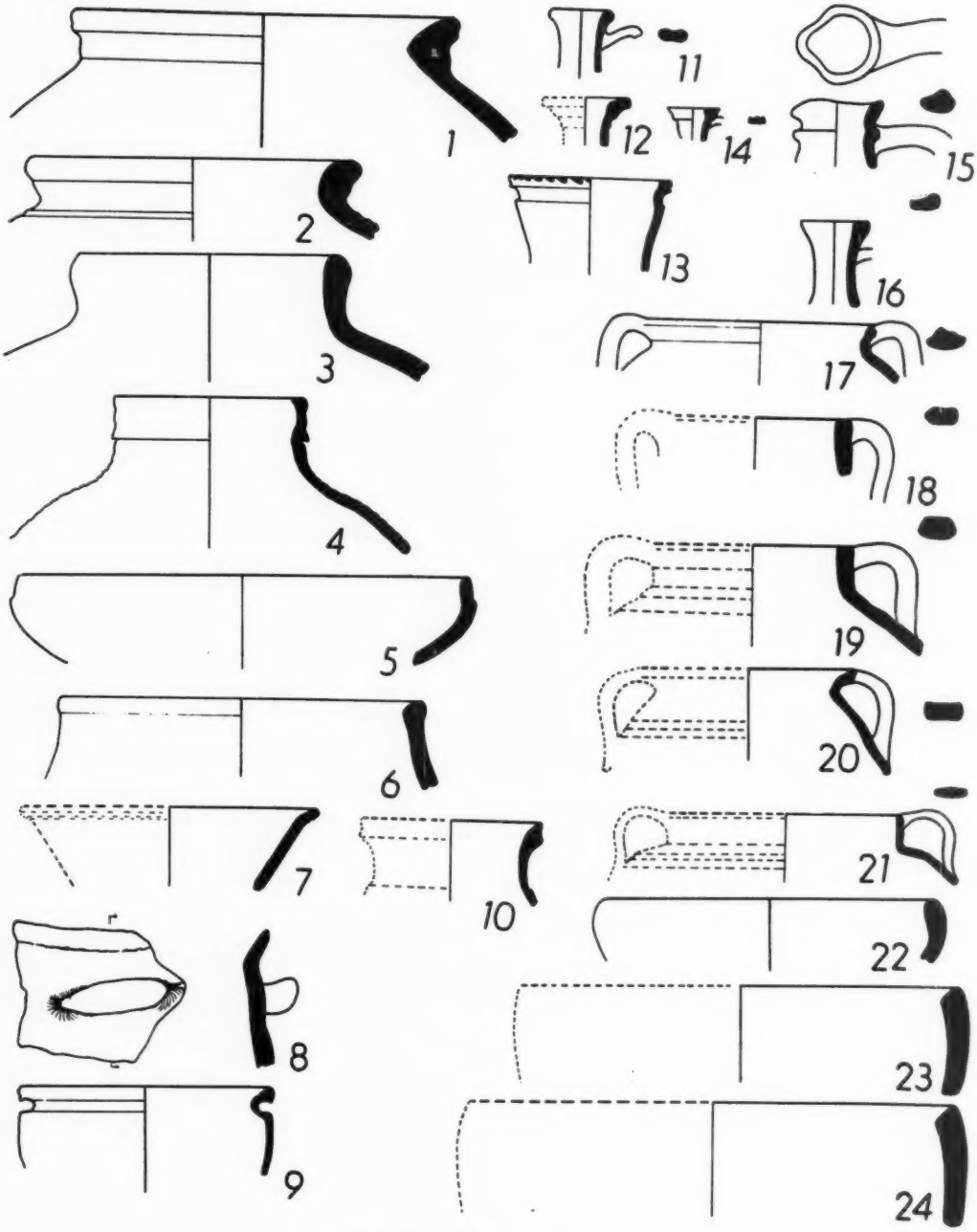


PLATE 71 Pottery drawings, rims and handles.

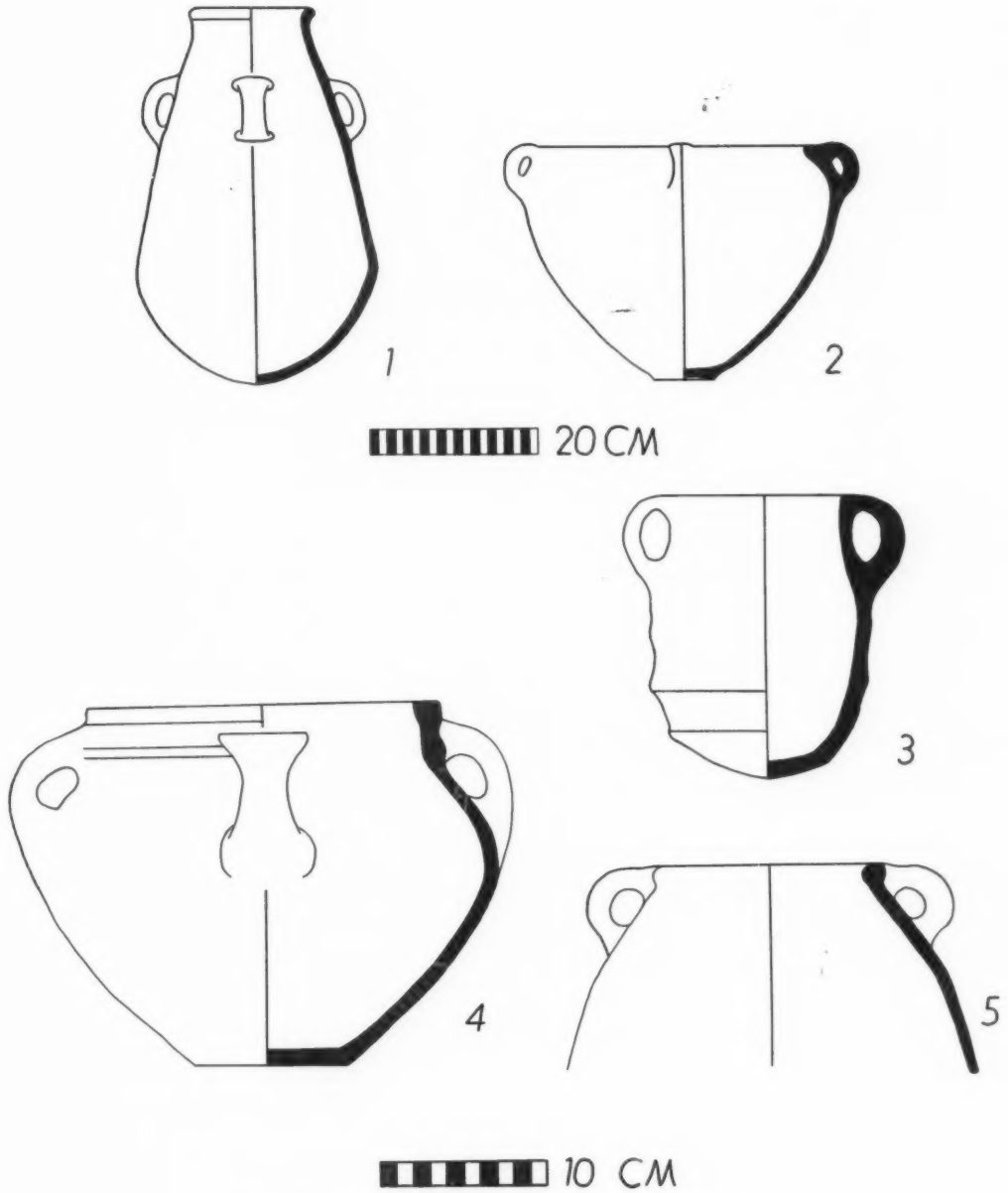


PLATE 72 Pottery drawings, Iron II jars and cooking pot.

(The neck of no. 1 as drawn is too wide, cf. Pl. 57:1. A corrected drawing was prepared by Dr. Reed, but was apparently lost. To prevent further delays in view of Dr. Reed's absence in Jordan, it was decided to publish this drawing rather than await the making of another. EDITOR).

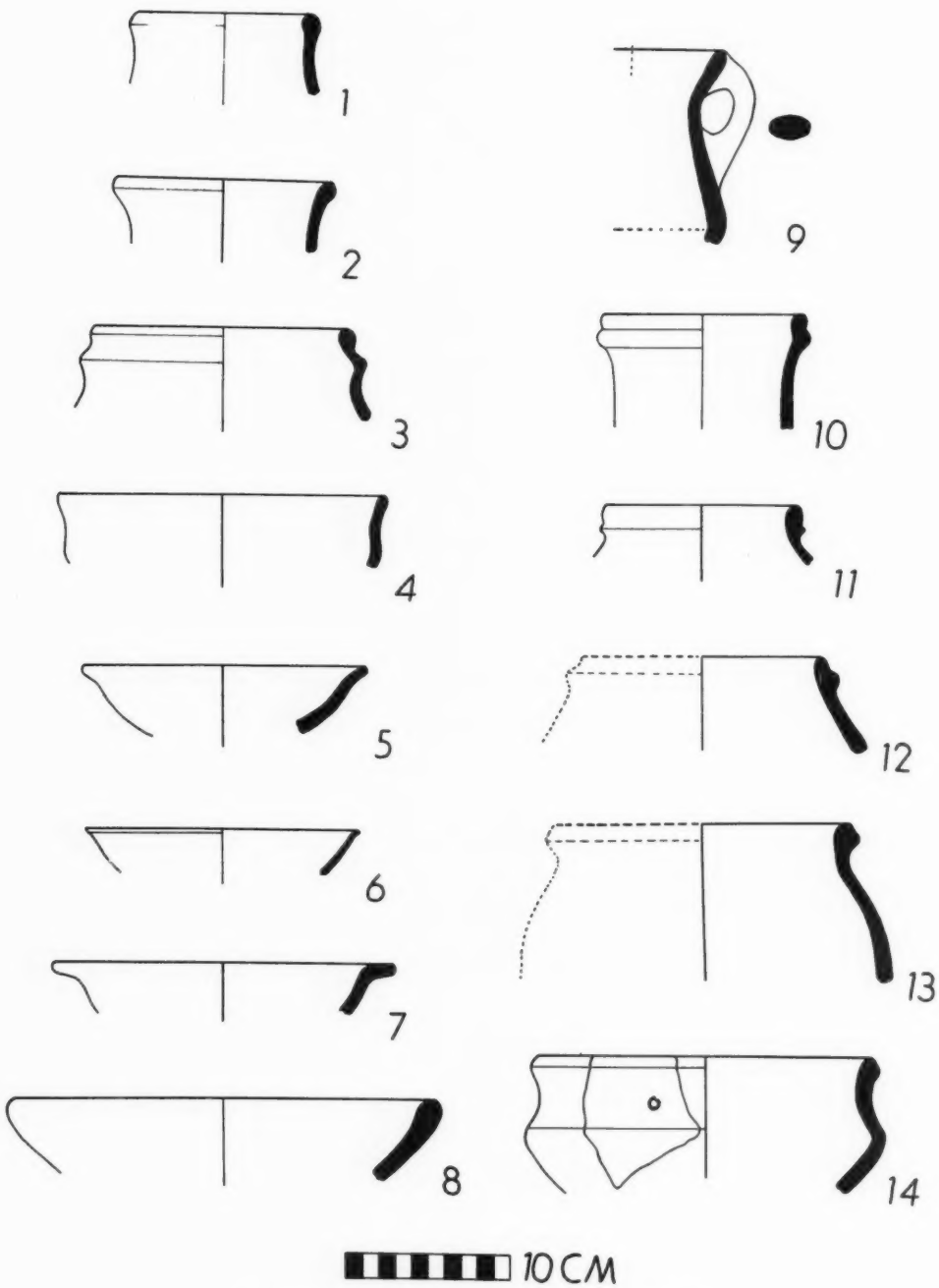


PLATE 73 Pottery drawings, rims of jars and bowls.

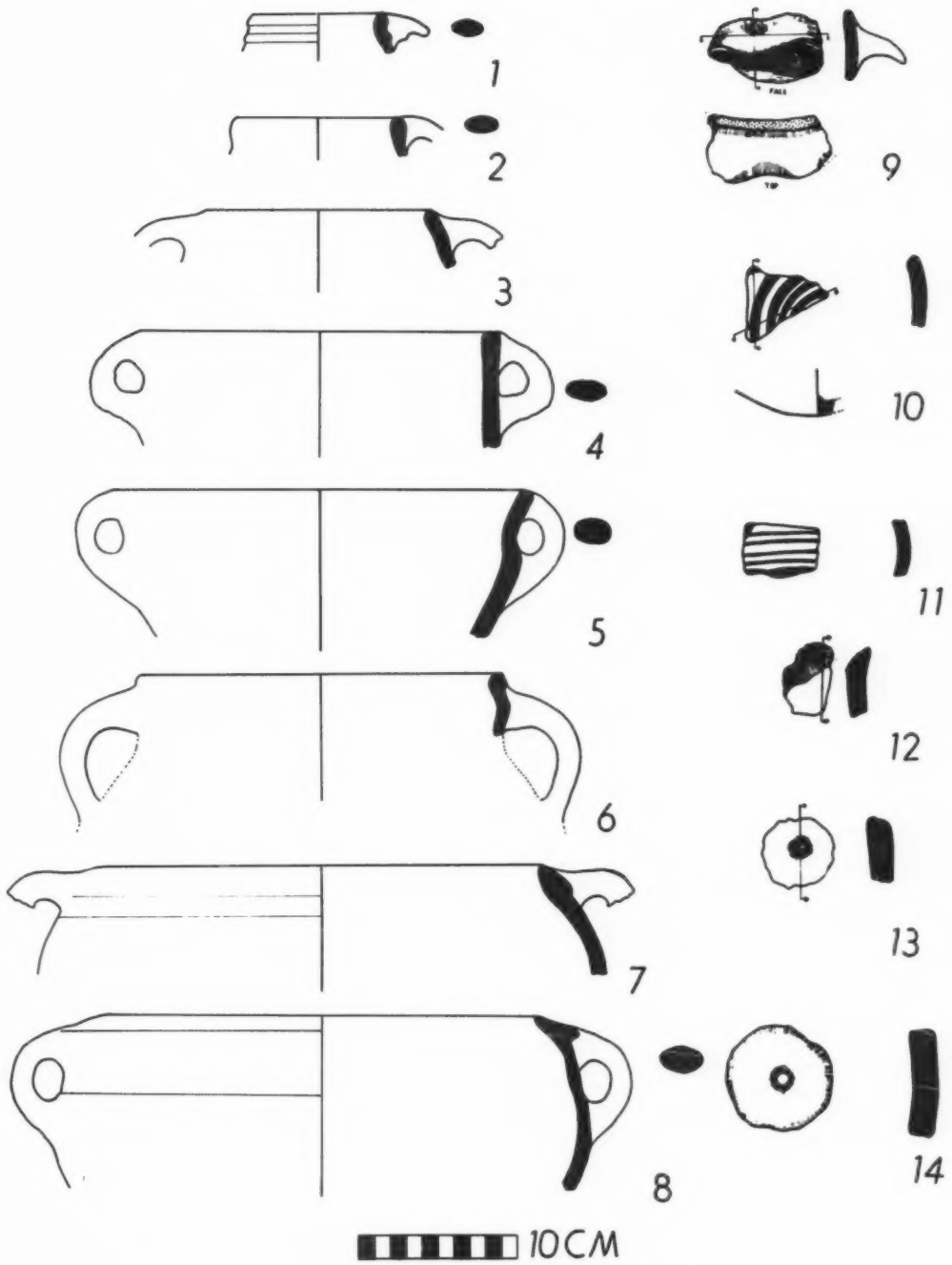


PLATE 74 Pottery drawings, handles, rims, and miscellaneous.

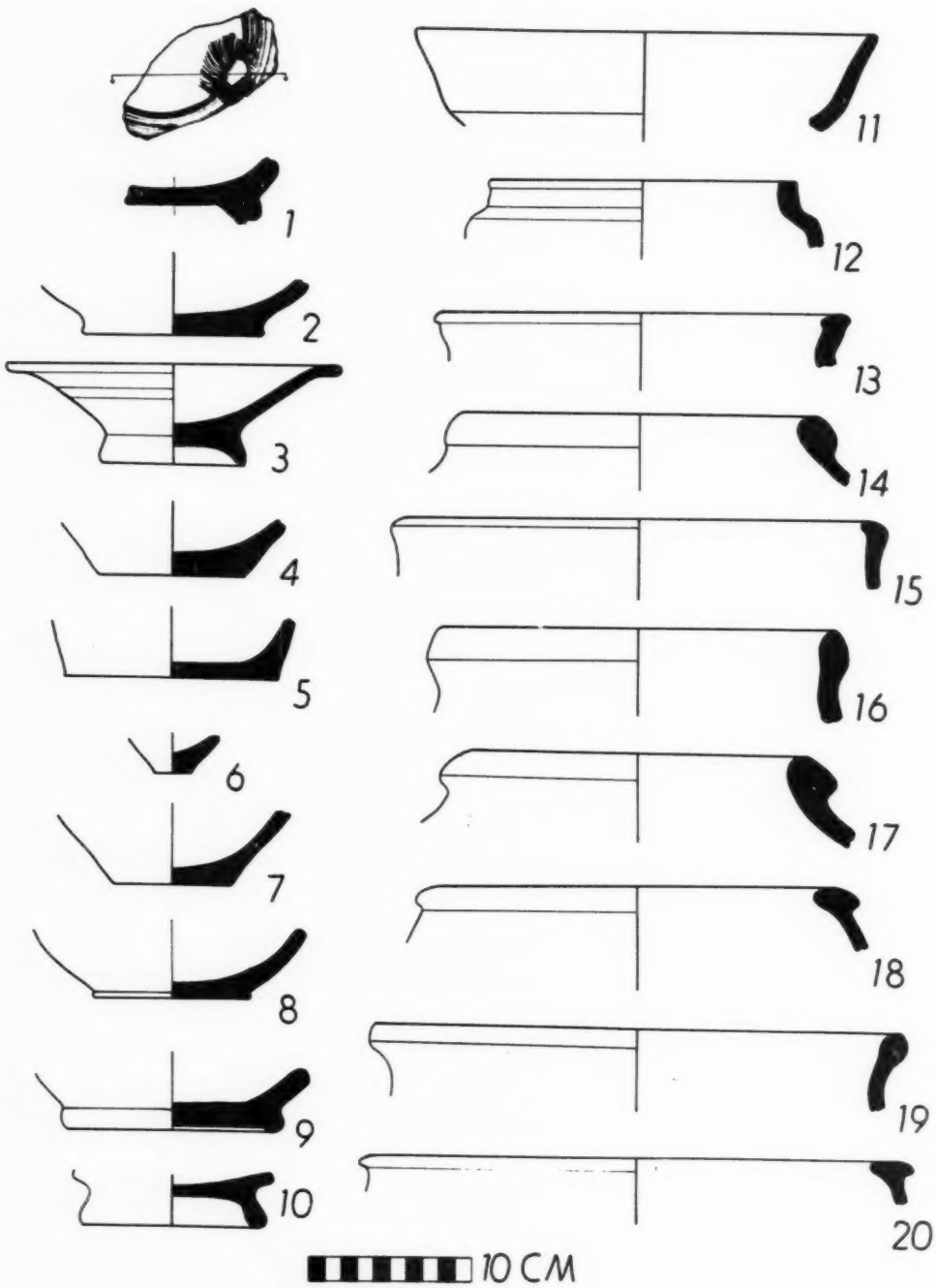


PLATE 75 Pottery drawings, bases and rims.

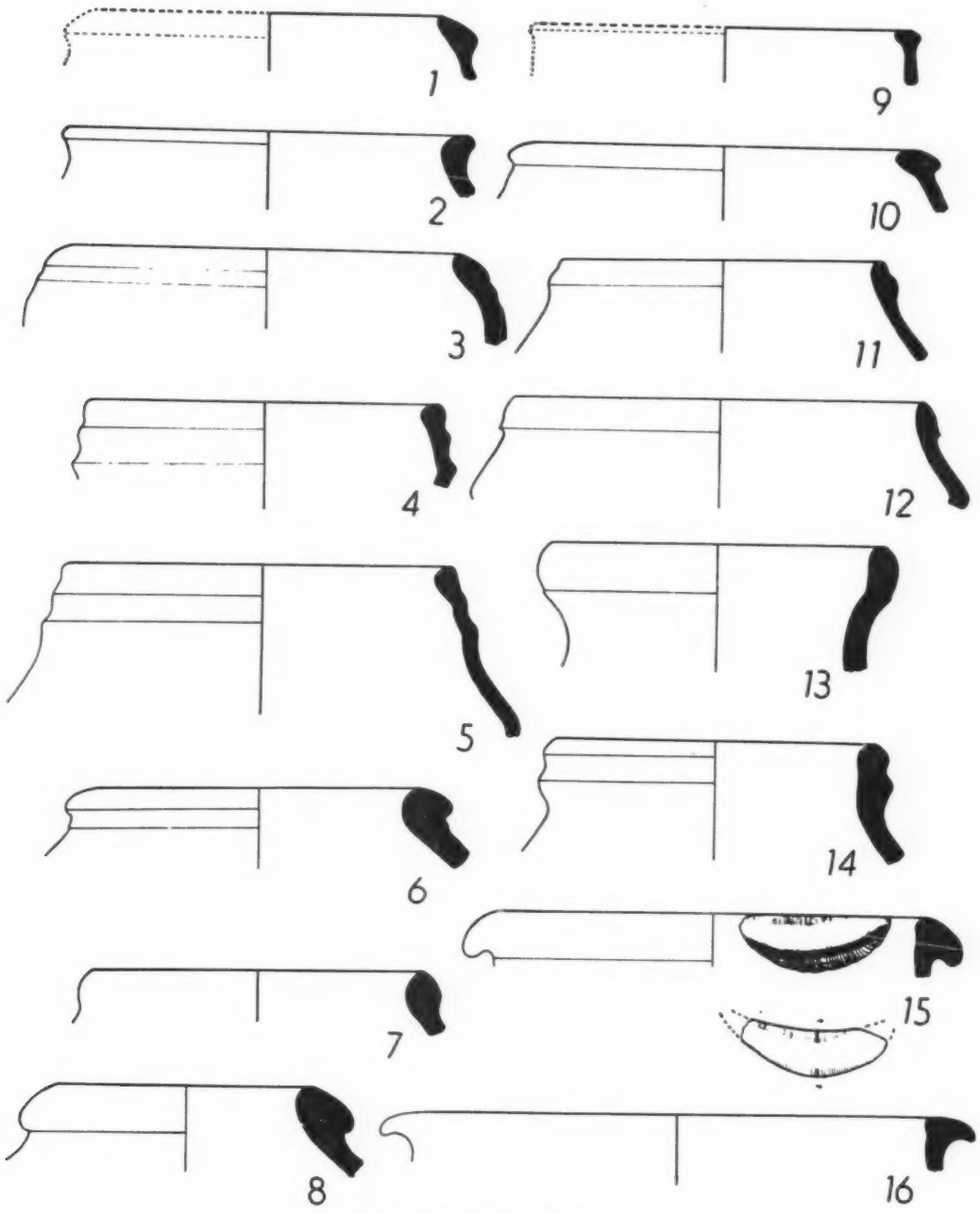


PLATE 76 Pottery drawings, rims.

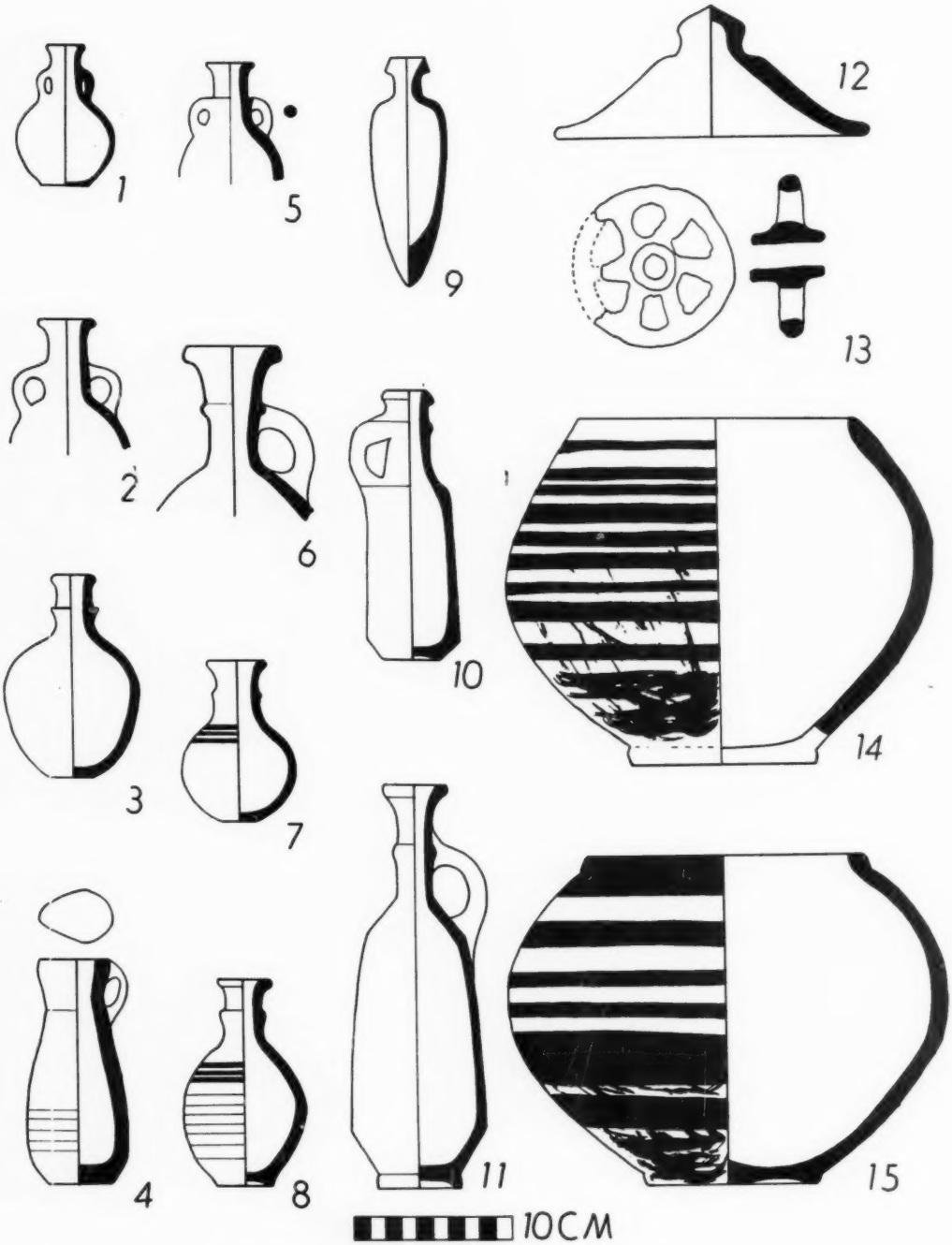


PLATE 77 Pottery drawings, tomb juglets and miscellaneous.

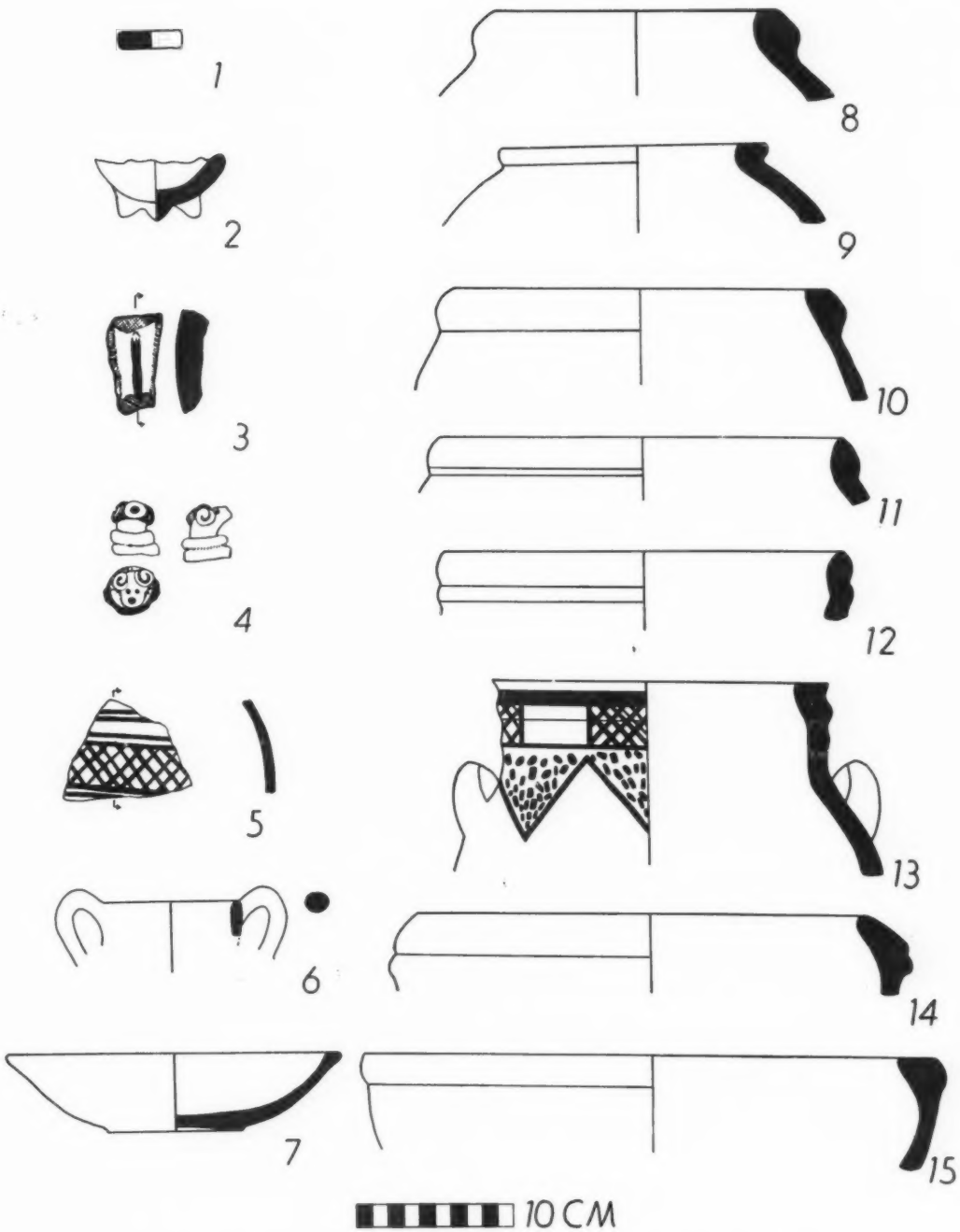


PLATE 78 Pottery drawings, pottery fragments from tombs (except no. 3).

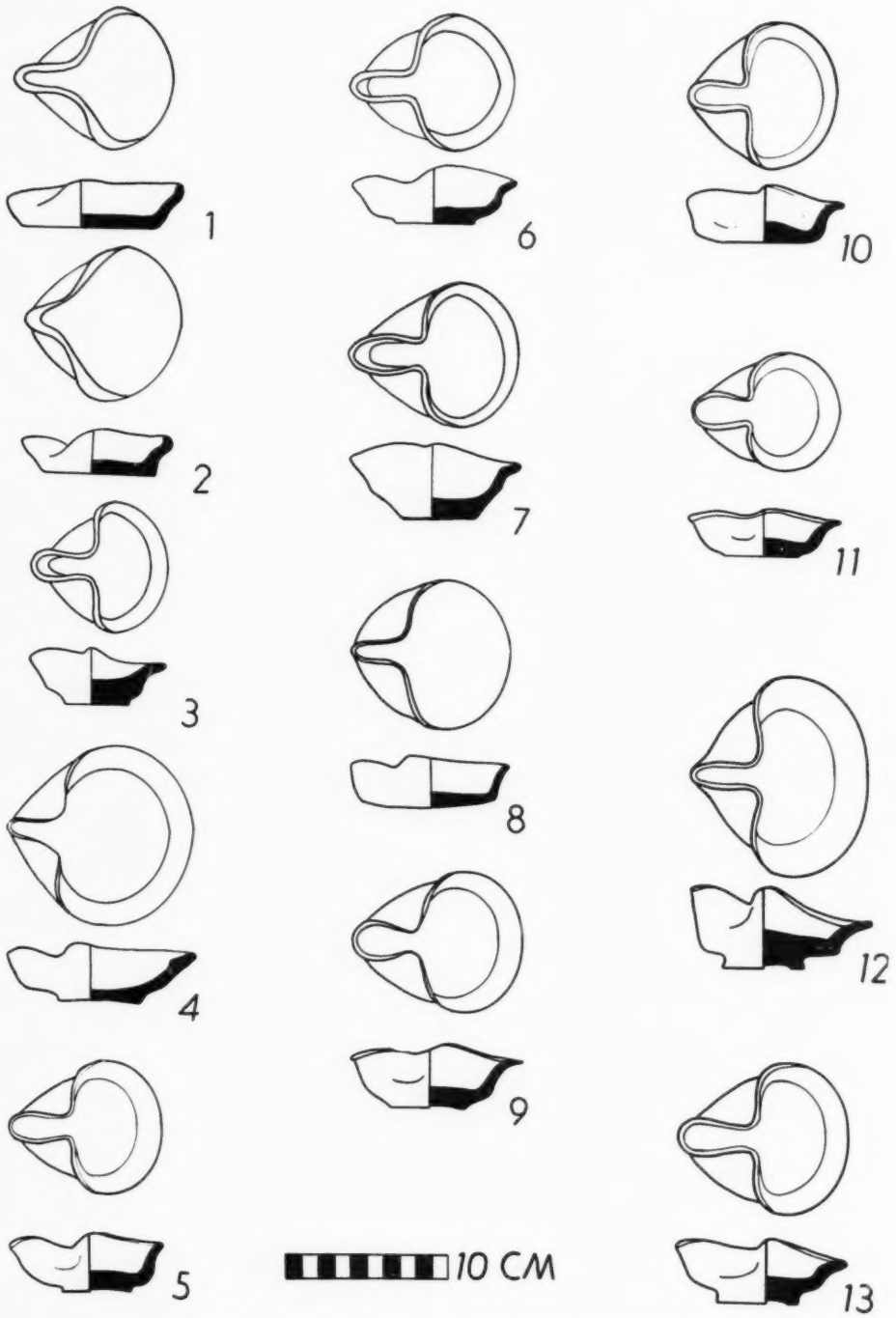


PLATE 79 Pottery drawings, Iron II lamps from Tomb J3.

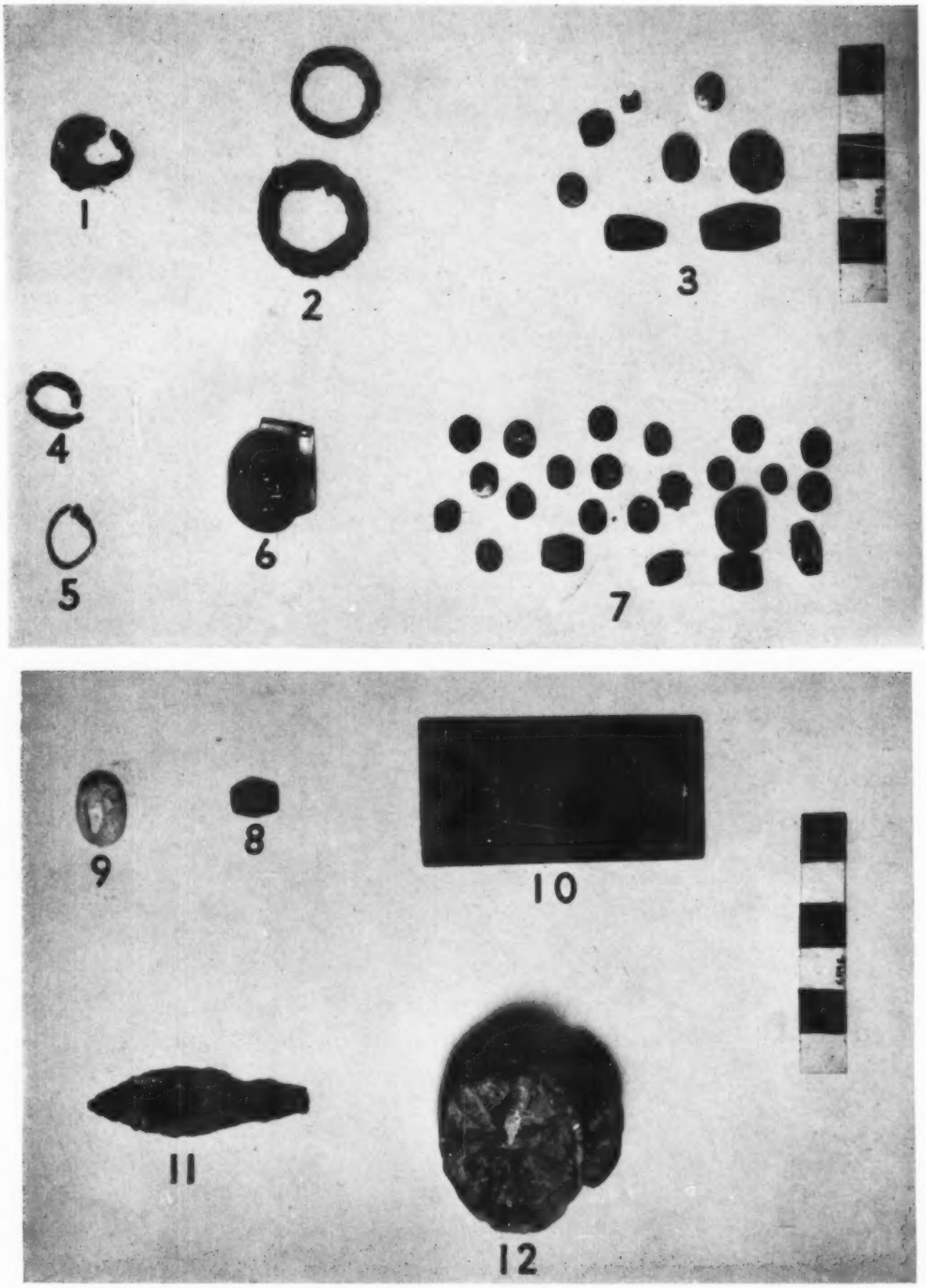
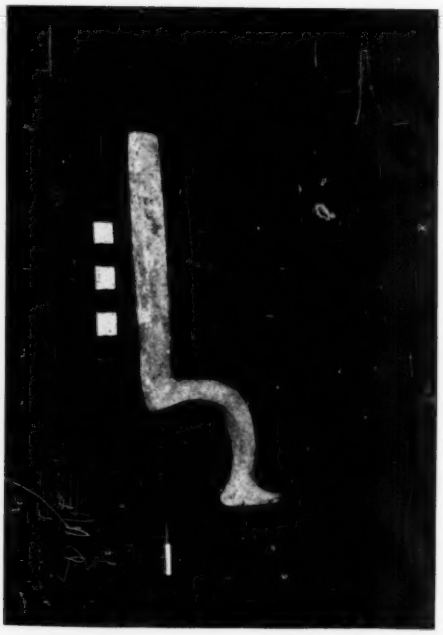
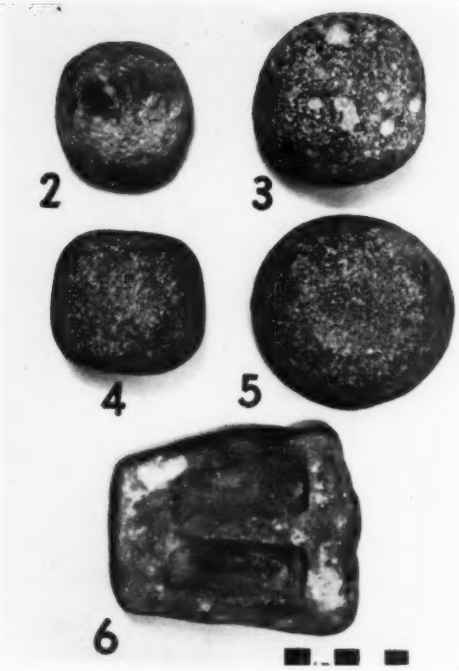
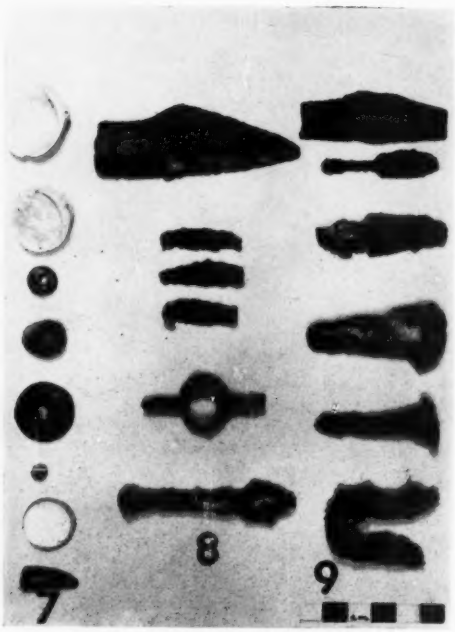


PLATE 80 Small objects.







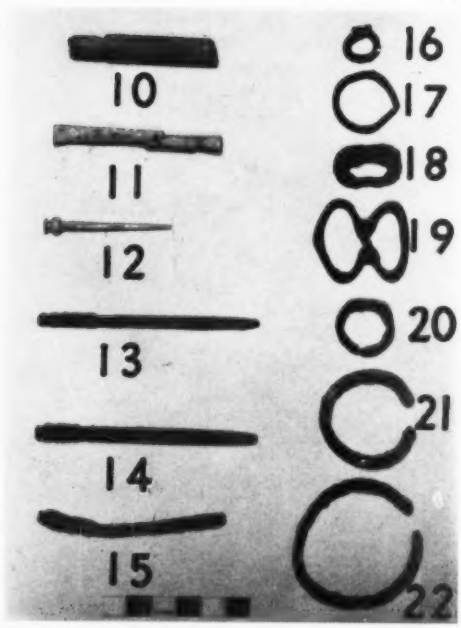


PLATE 81 Small objects.

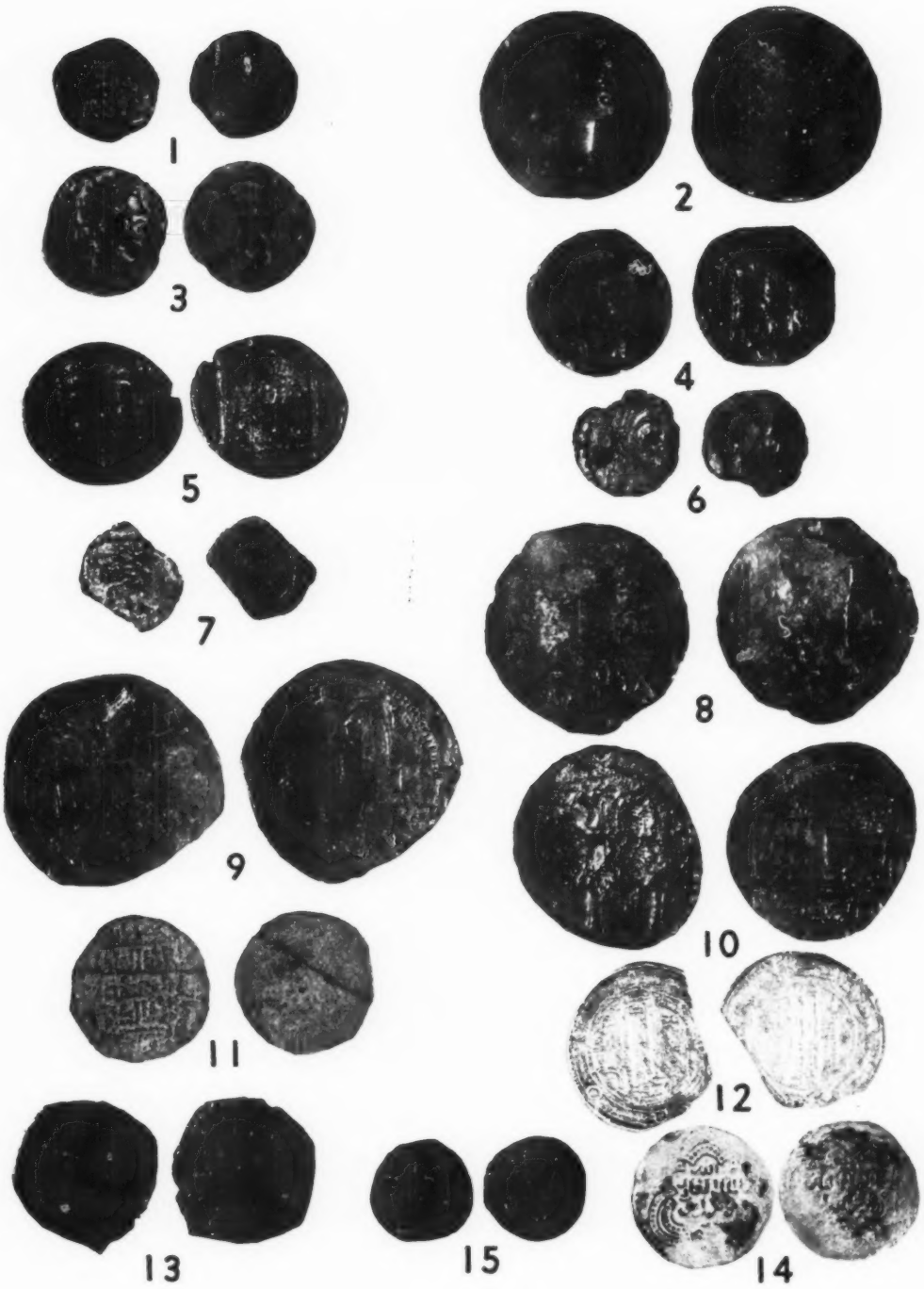


PLATE 82 Coins.

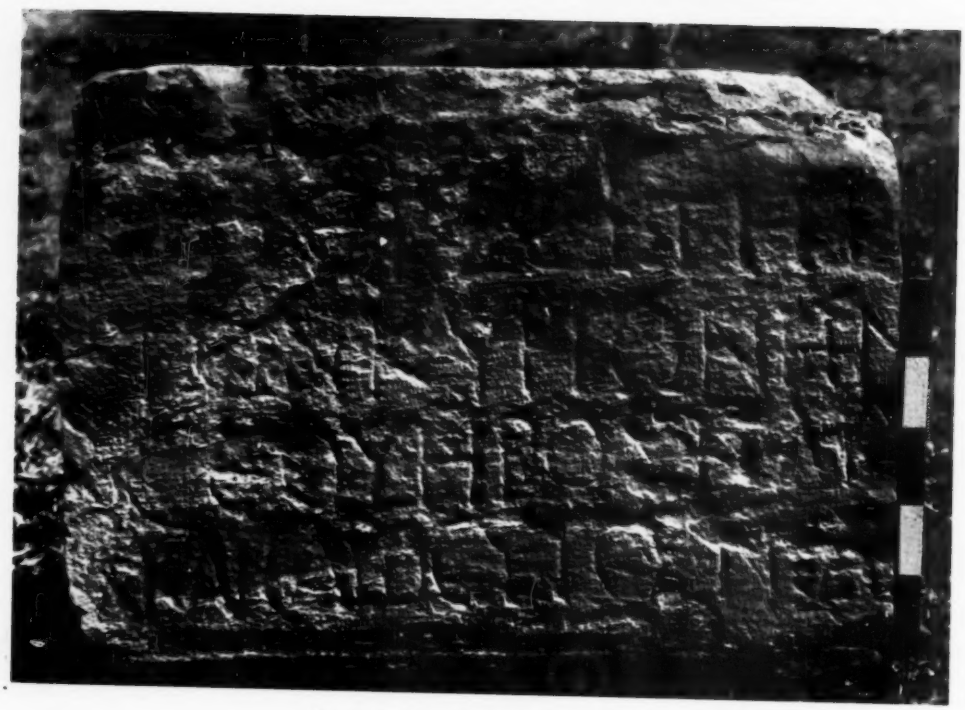


PLATE 83:1 and 2 Inscribed stones.

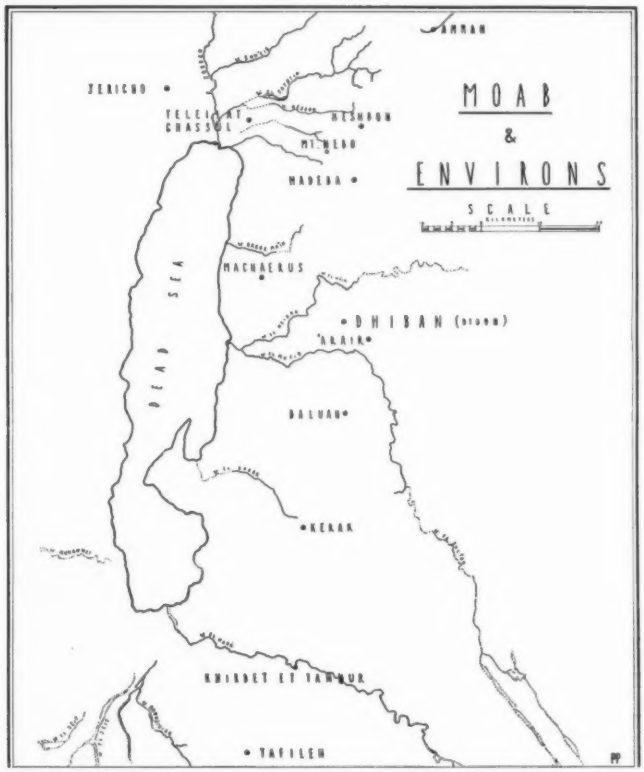


PLATE 84 Map of Moab and environs.

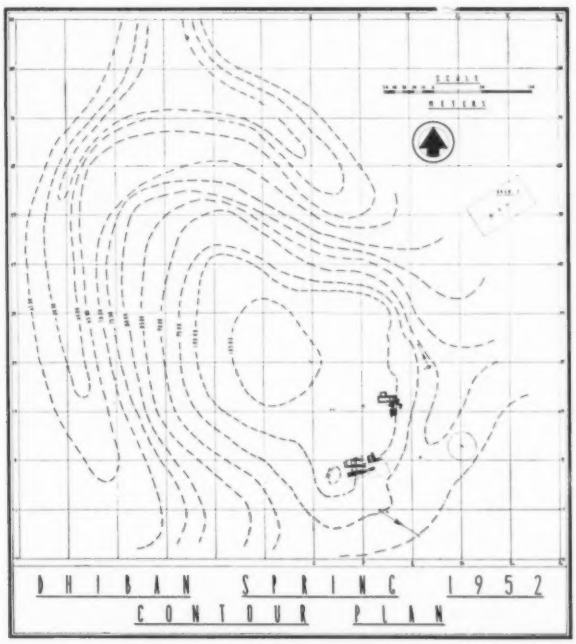


PLATE 85 Contour plan of Dhībân.

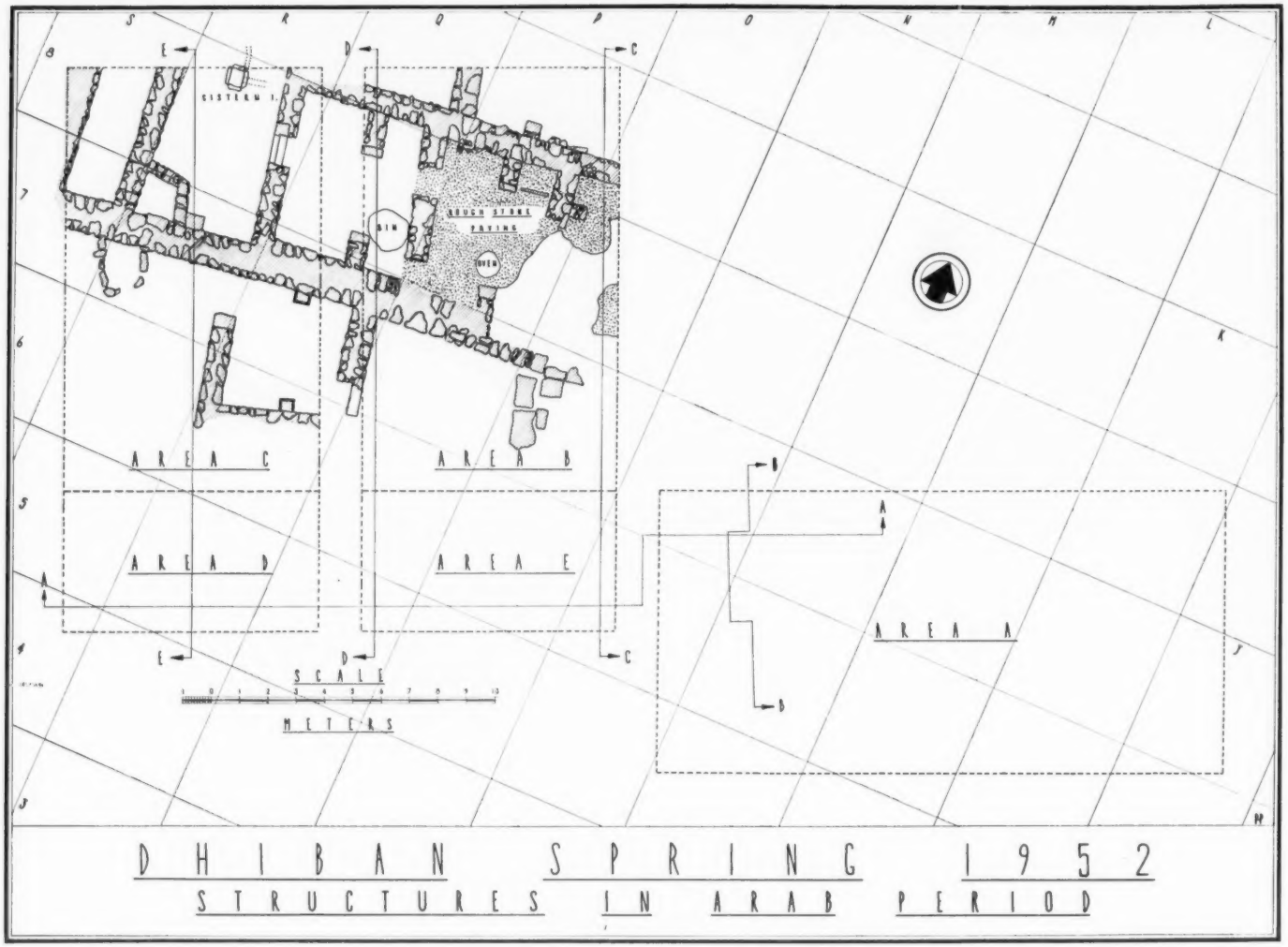


PLATE 86 Detailed plan of structures in Arab period.

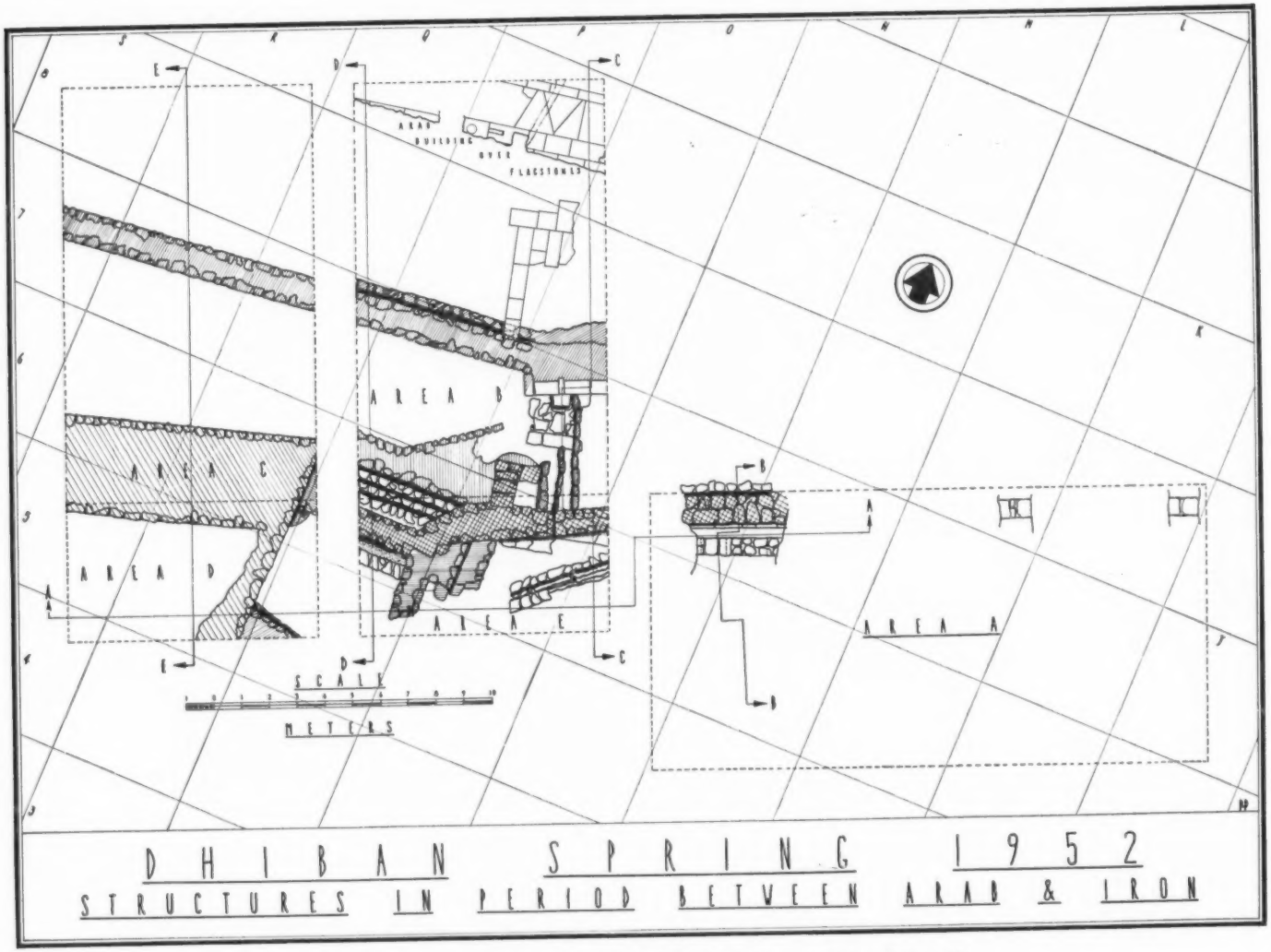


PLATE 87 Detailed plan of structures in periods between Arab and Iron II.

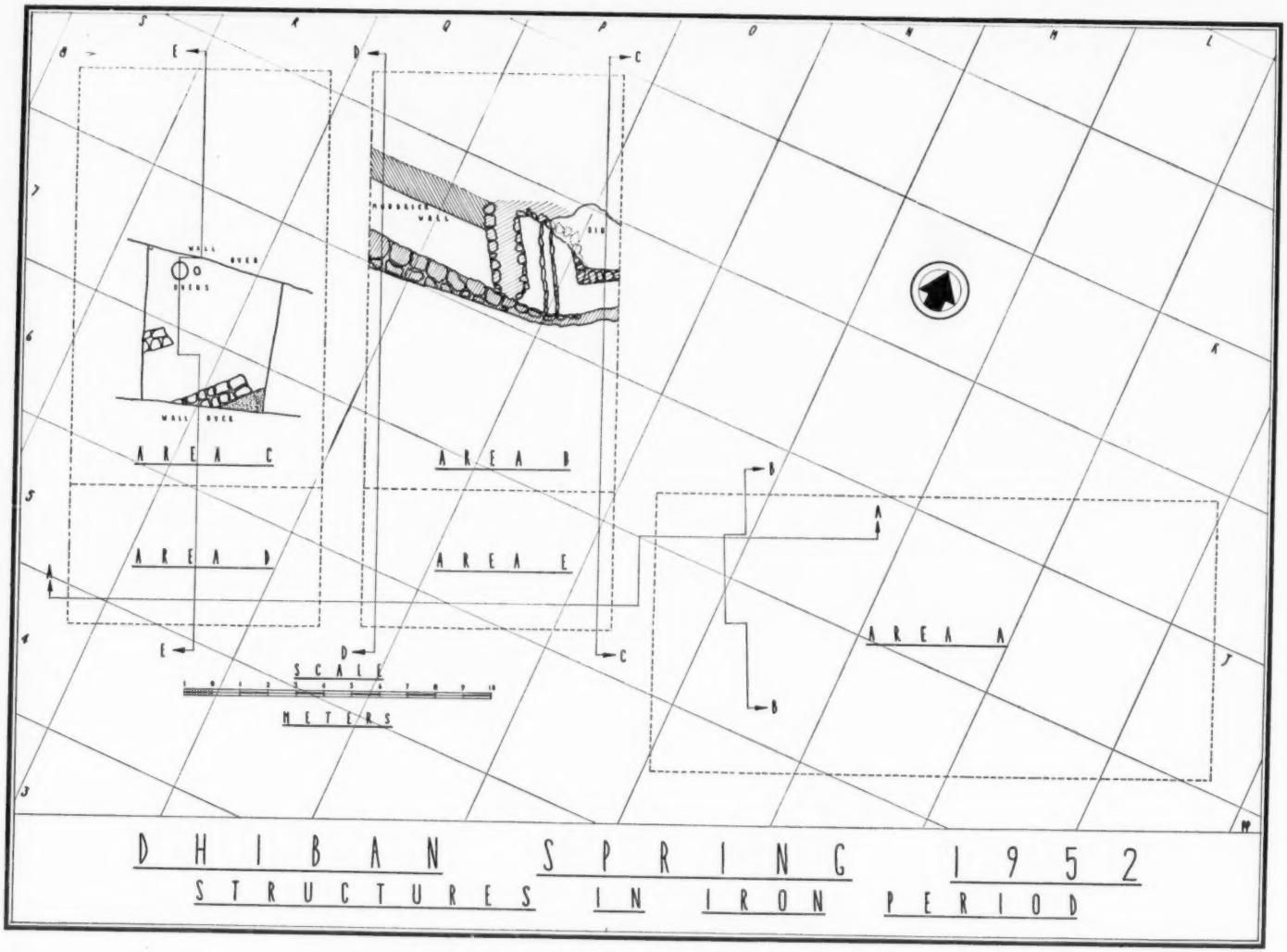


PLATE 88 Detailed plan of structures in Iron period.

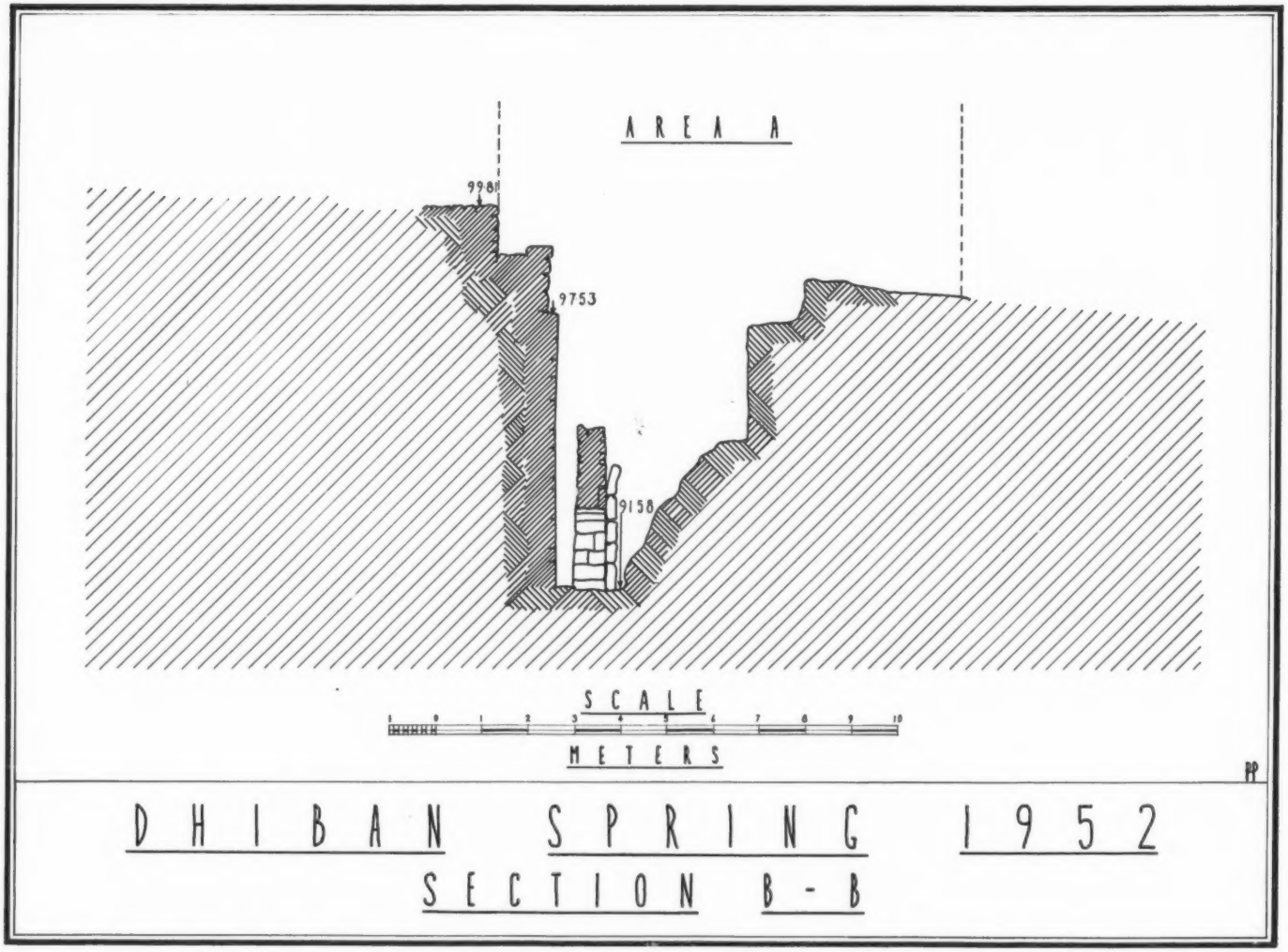


PLATE 89 Detailed drawing of section B-B, Area A.

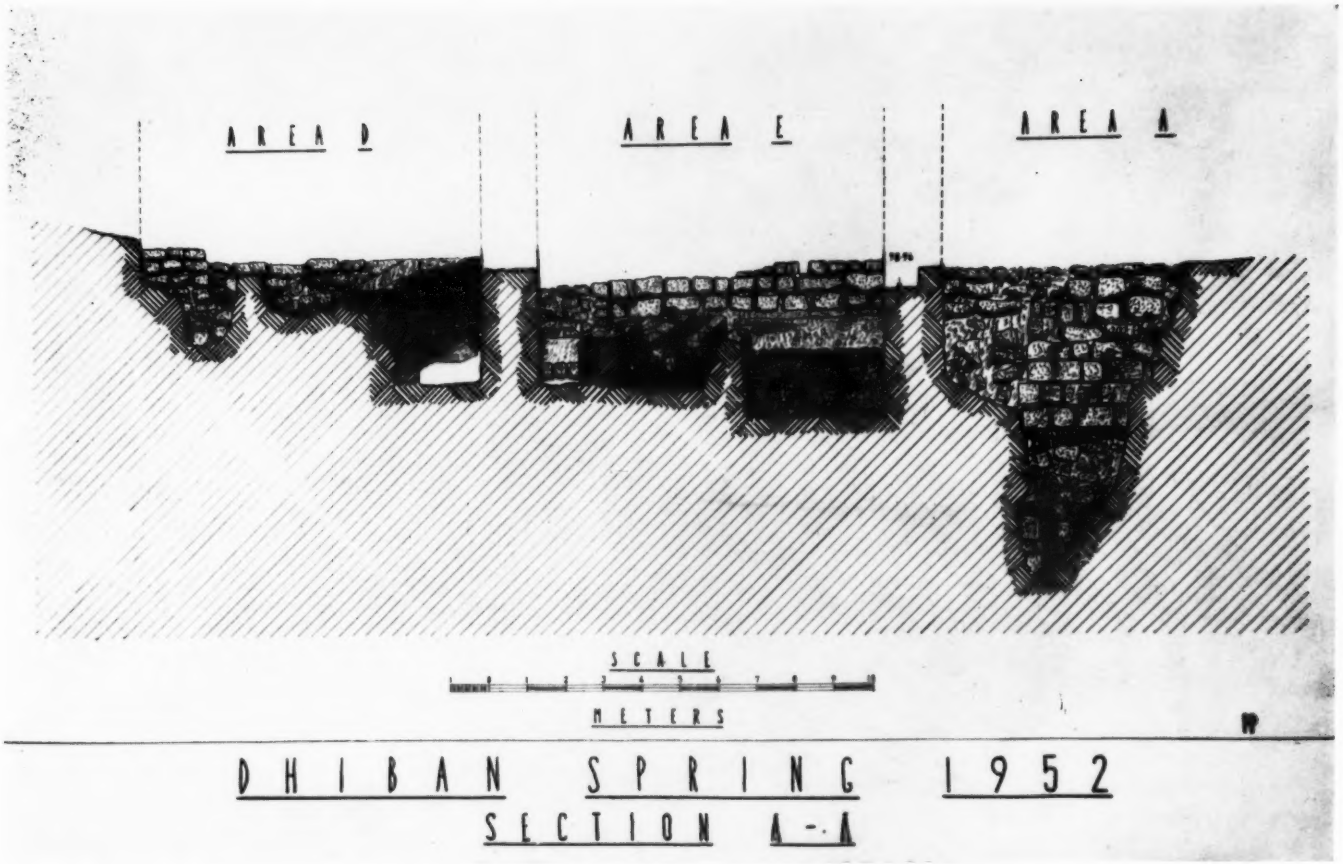


PLATE 90 Detailed drawing of section A-A, Areas D, E and A.

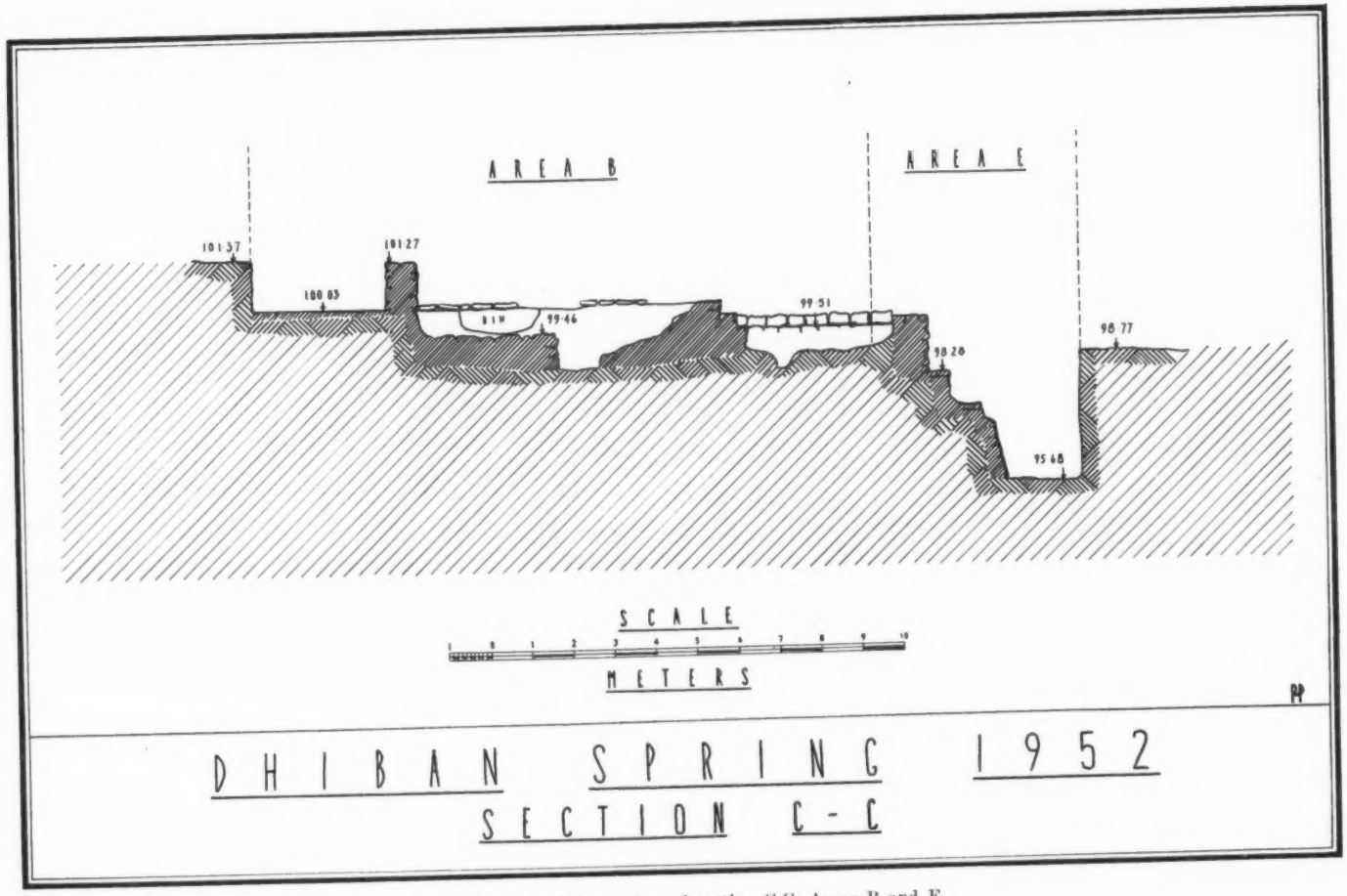


PLATE 91 Detailed drawing of section C-C, Areas B and E.

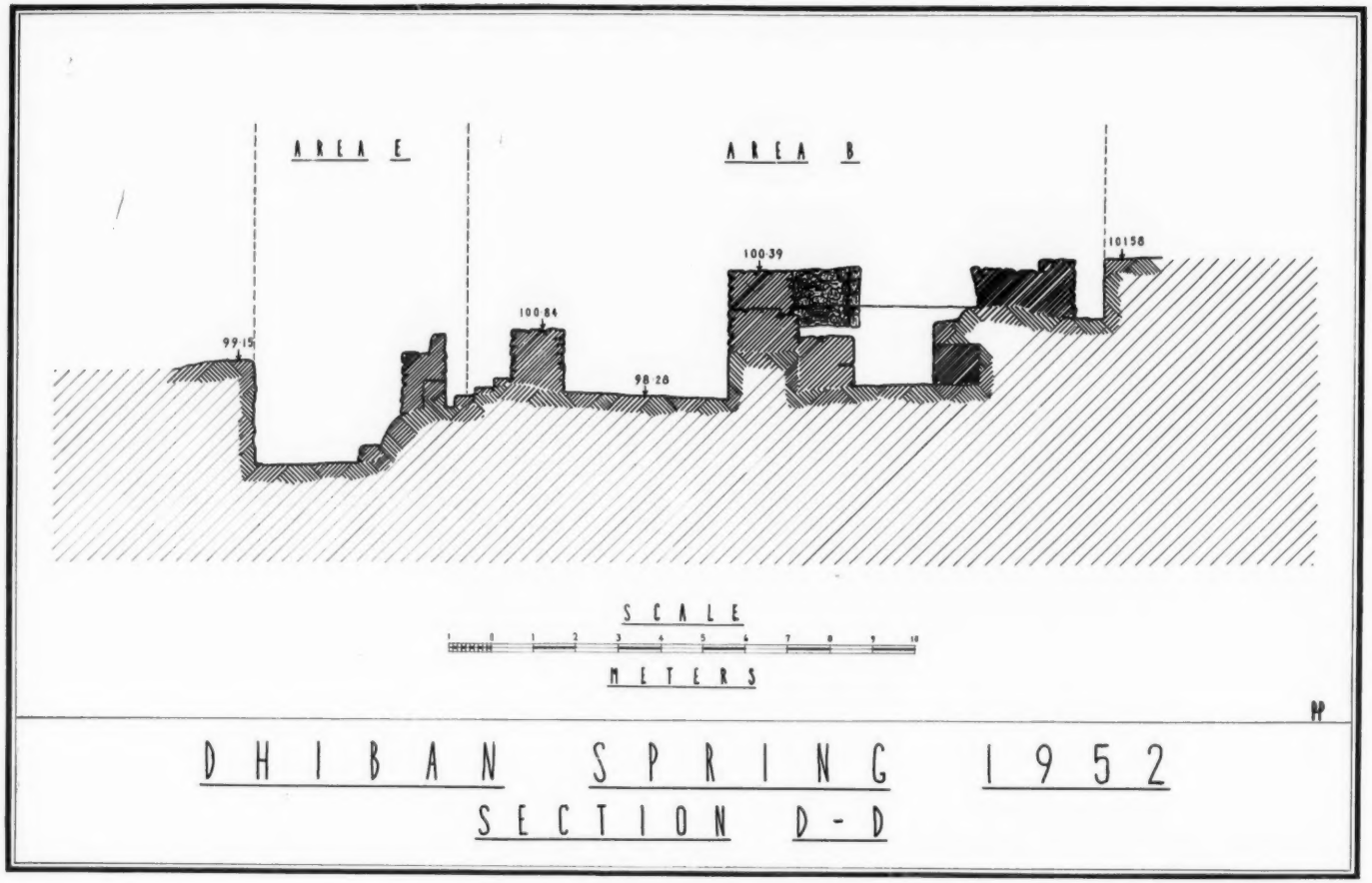


PLATE 92 Detailed drawing of section D-D, Areas E and B.

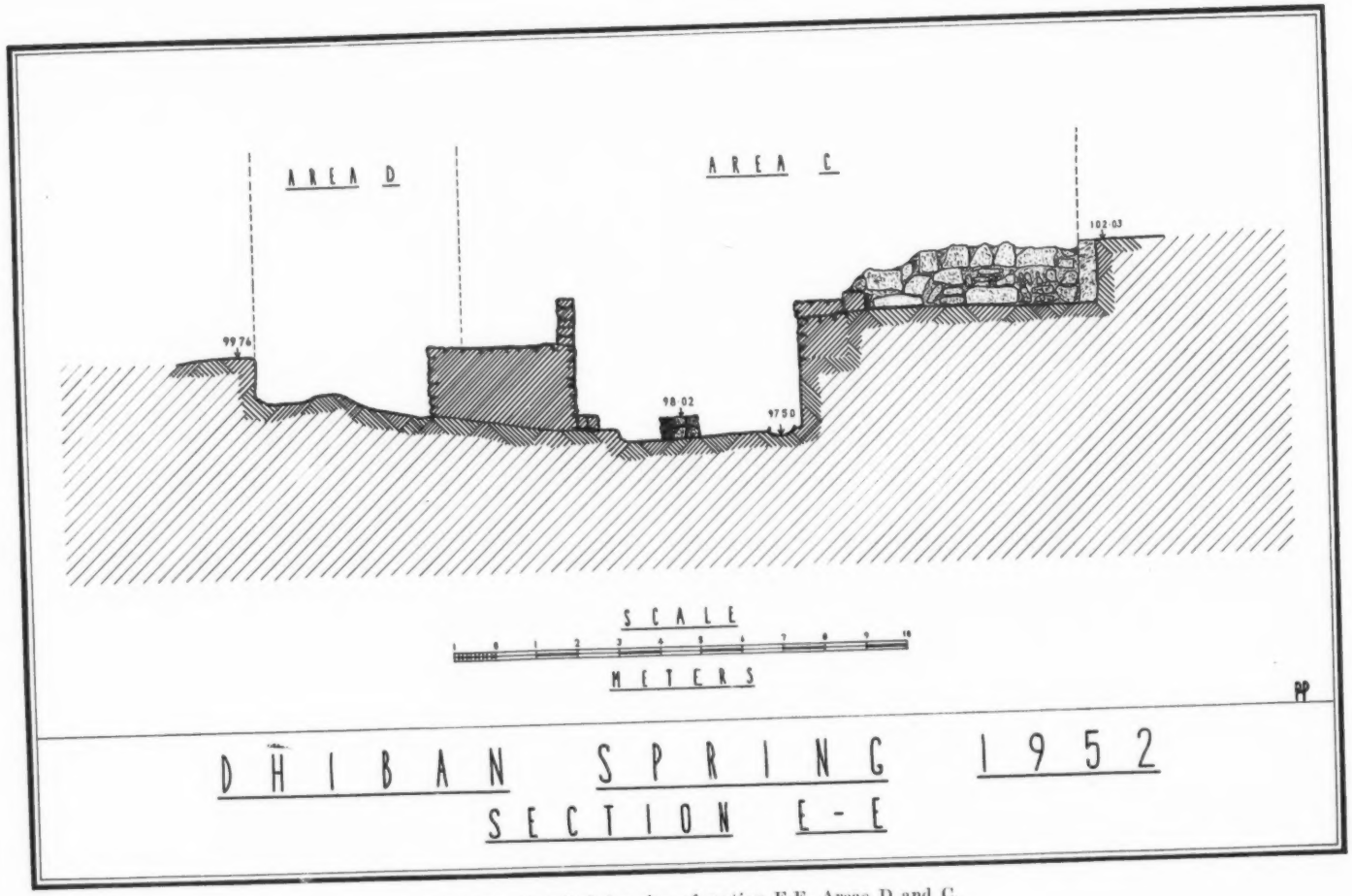


PLATE 93 Detailed drawing of section E-E, Areas D and C.

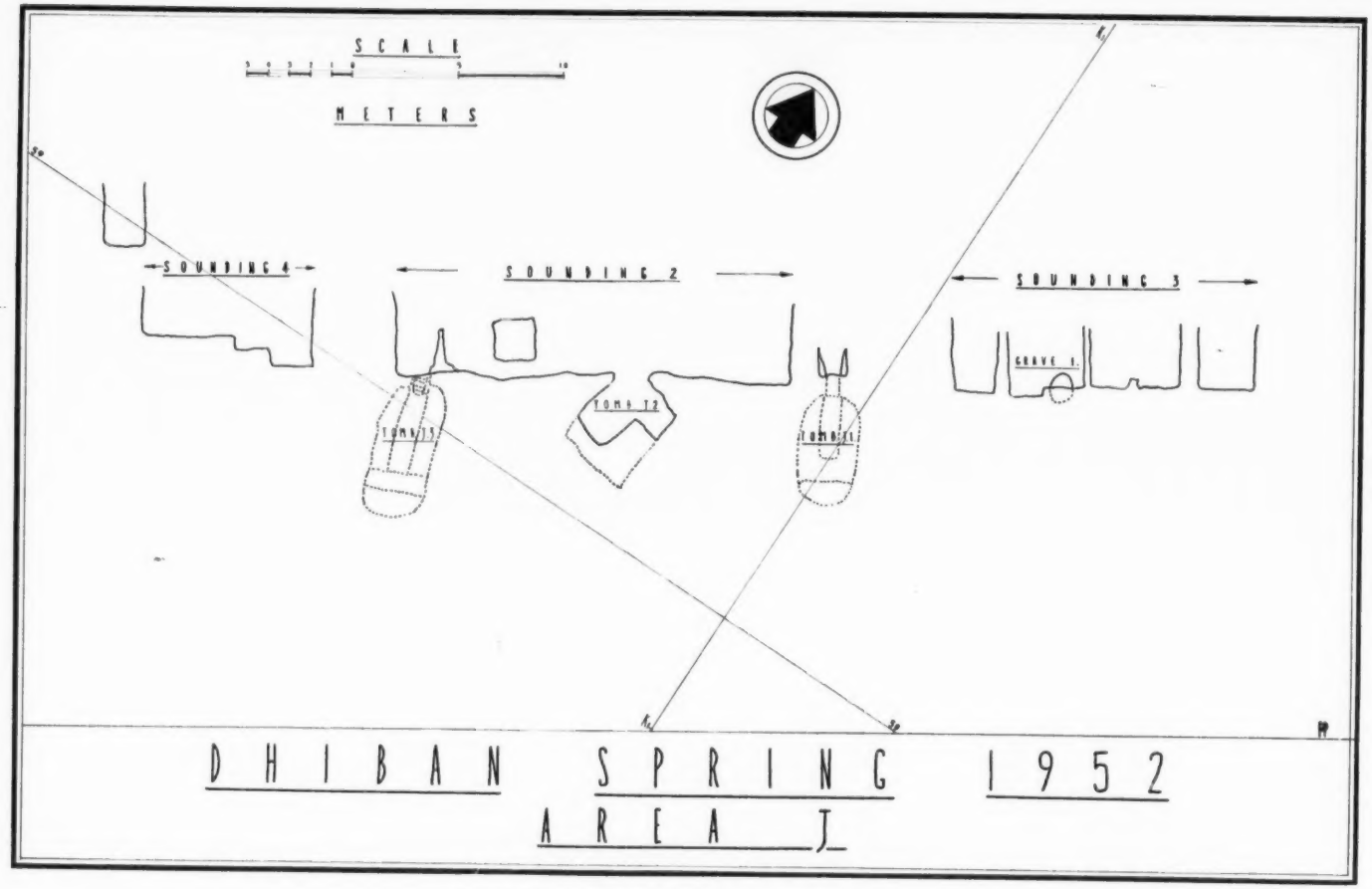


PLATE 94 Detailed plan of Area J, Tomb area.

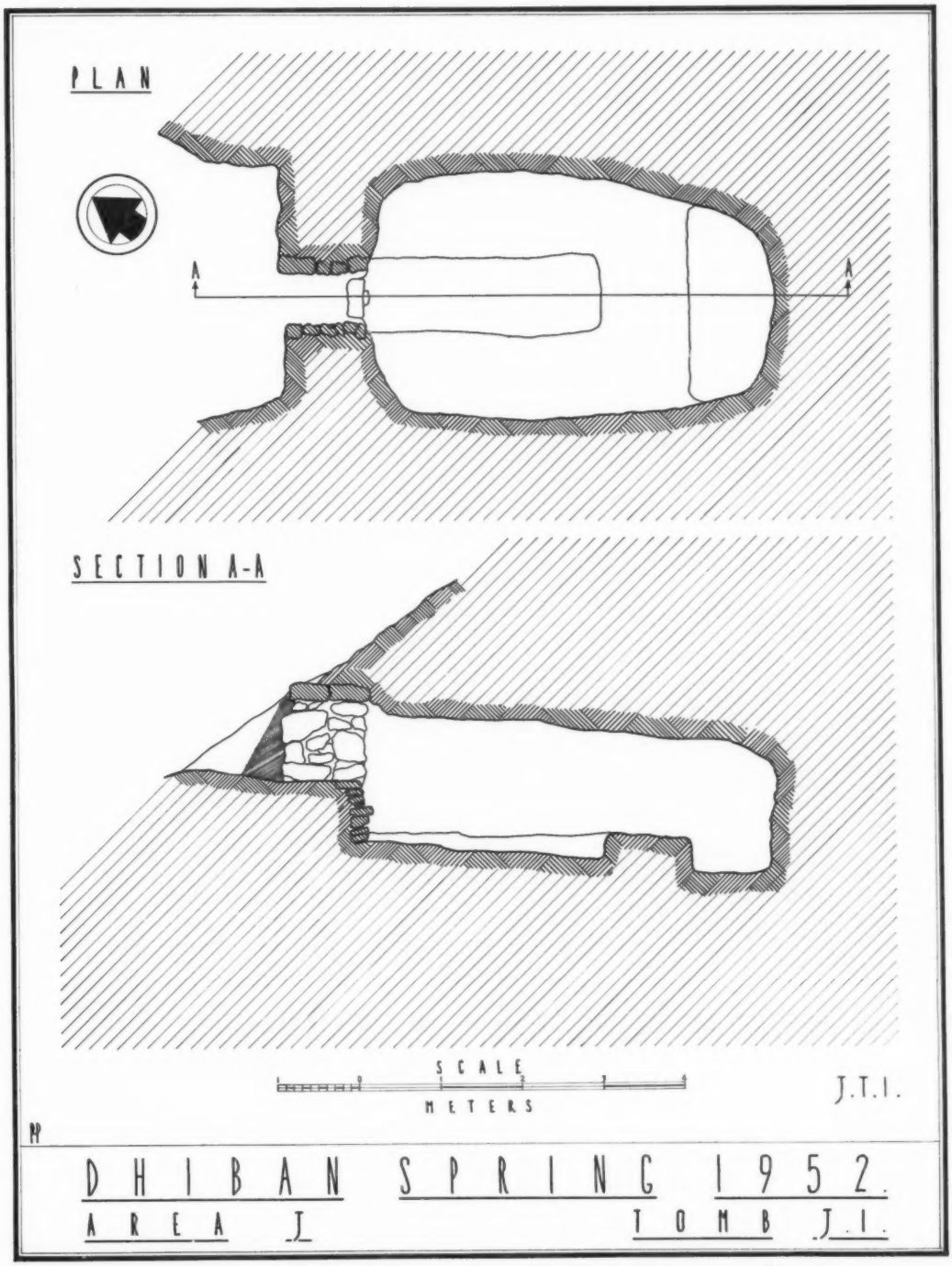


PLATE 95 Detailed plan and section A-A of Tomb J1. .

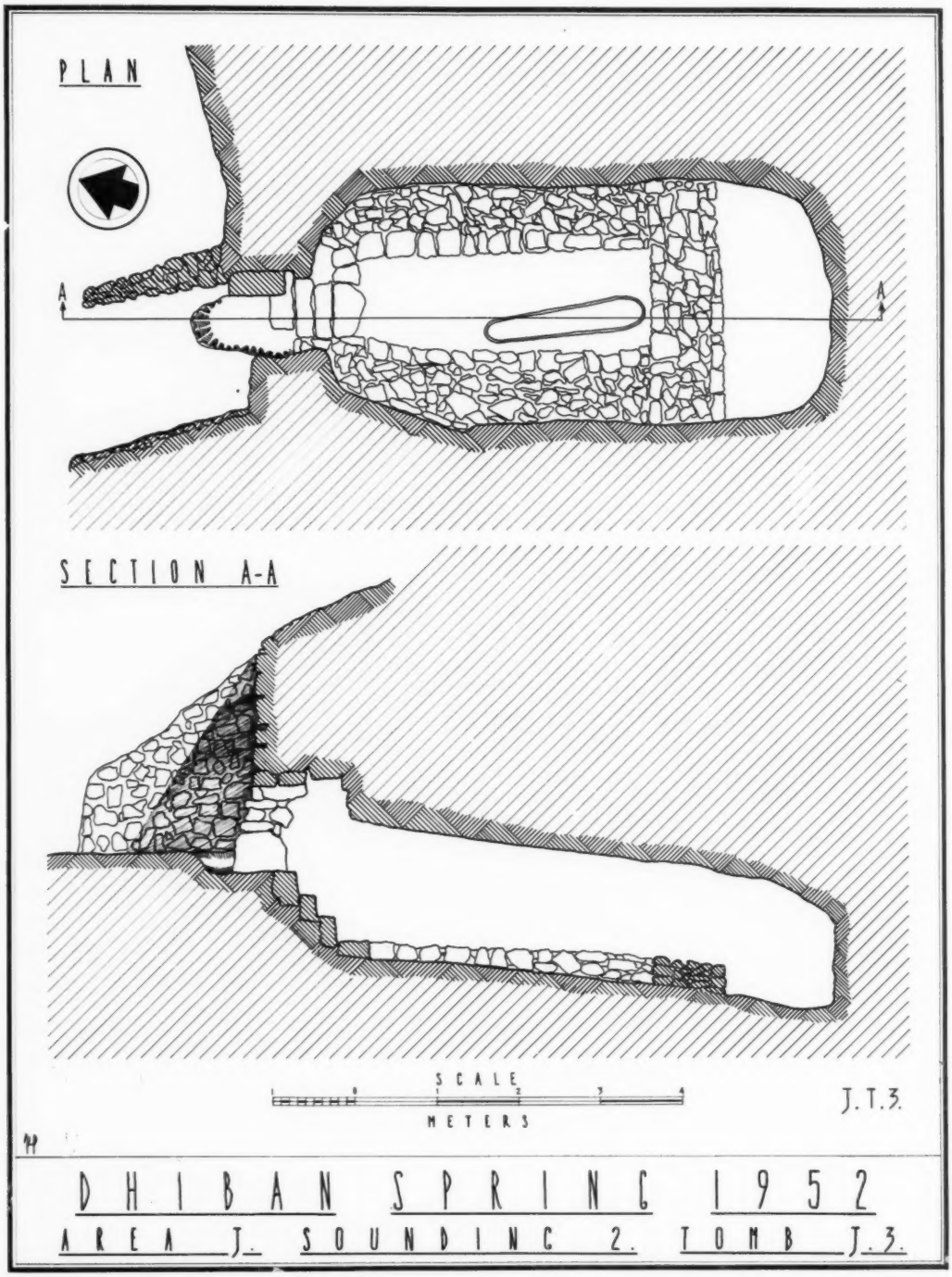


PLATE 96 Detailed plan and section A-A of Tomb J3.

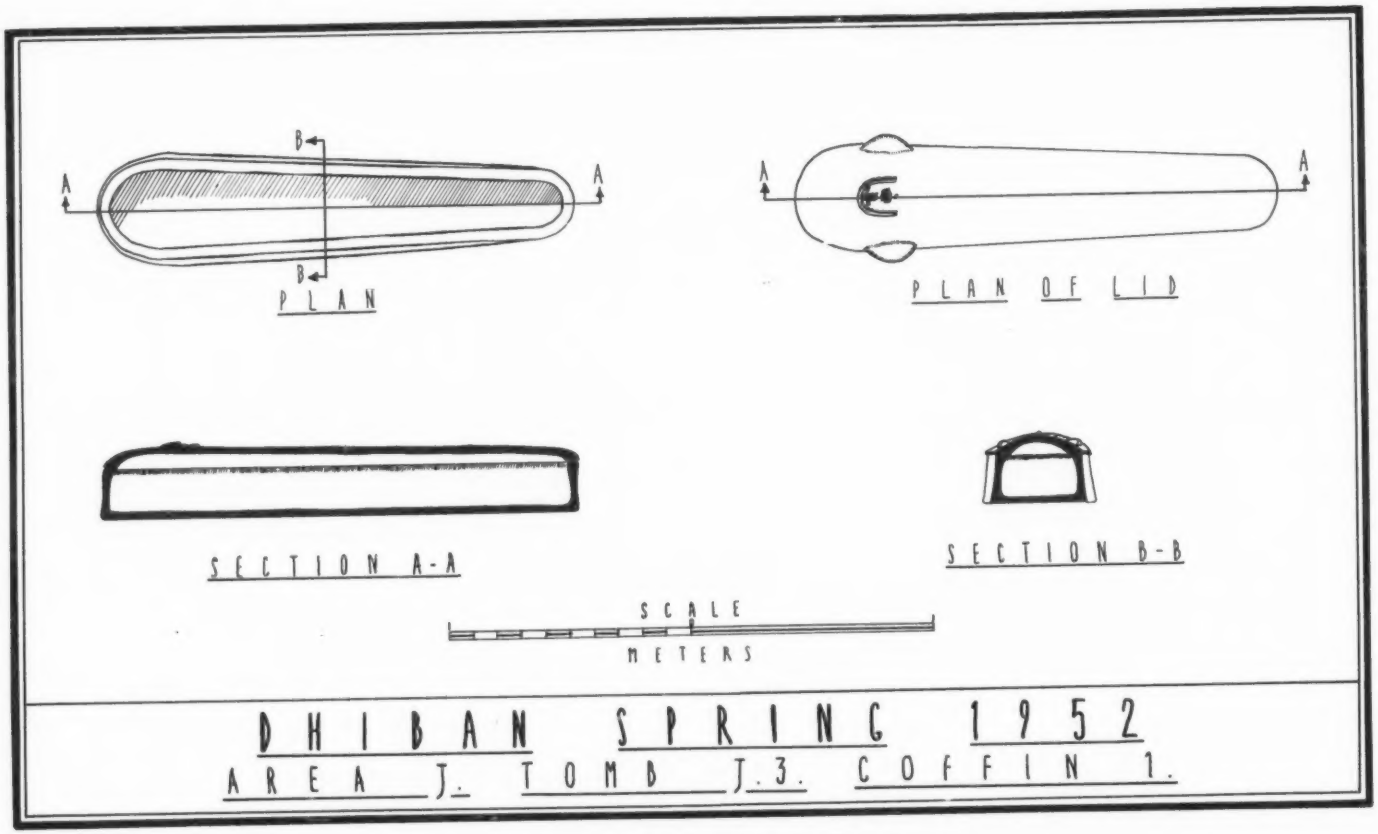


PLATE 97 Detailed plan and sections of coffin and cover.

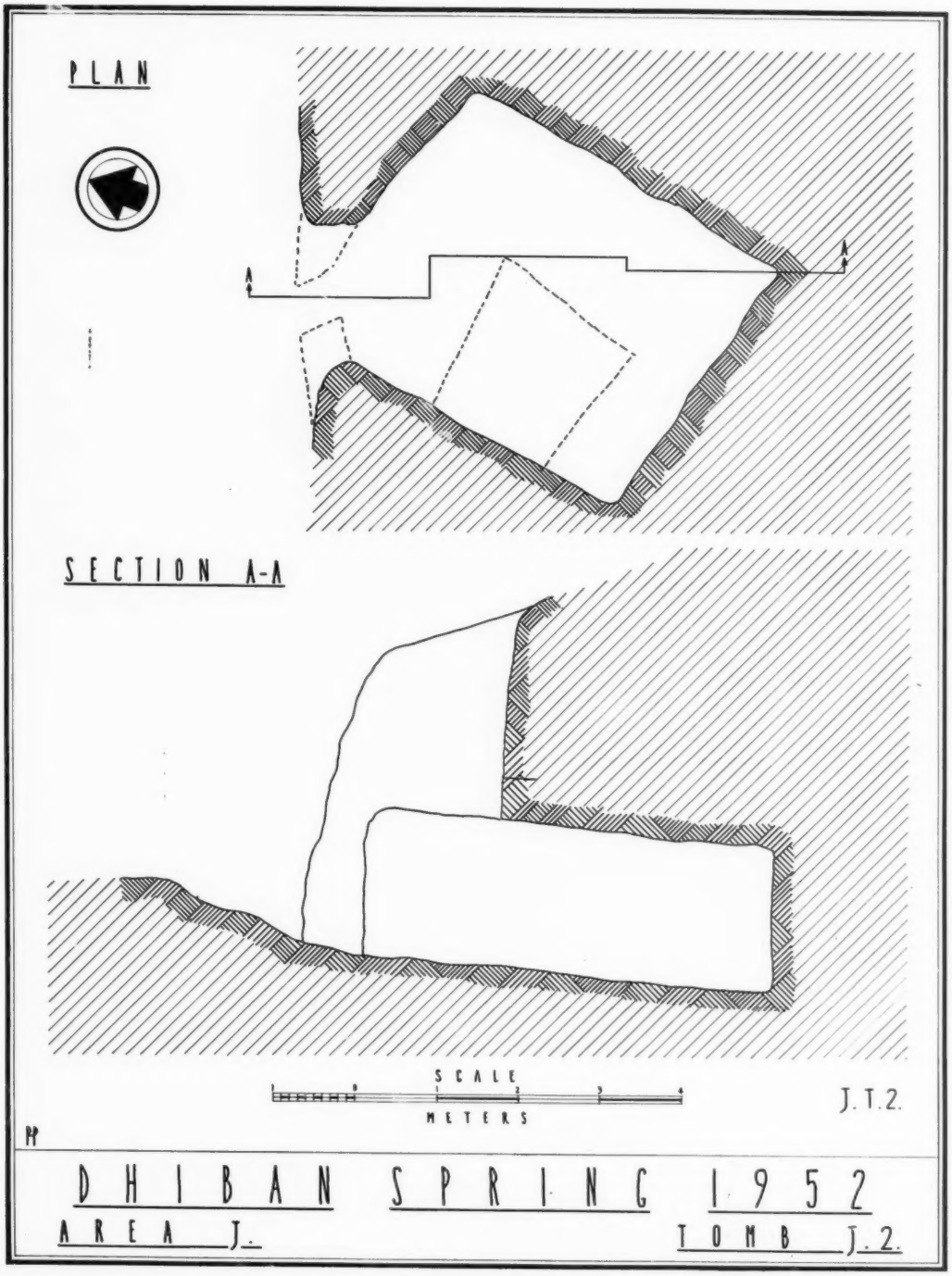


PLATE 98 Detailed plan and section A-A, Tomb J2.

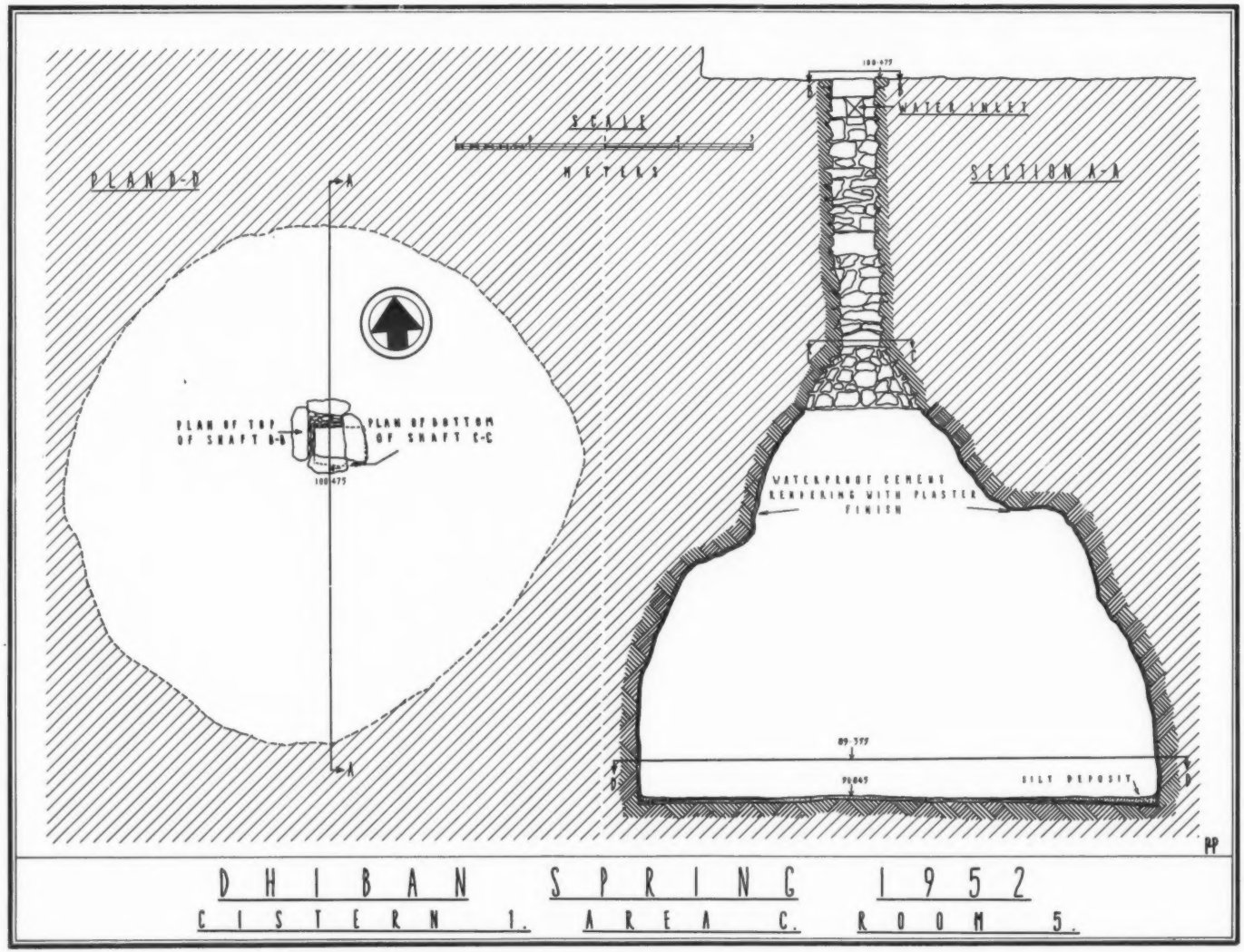


PLATE 99 Detailed plan and section of cistern 1.